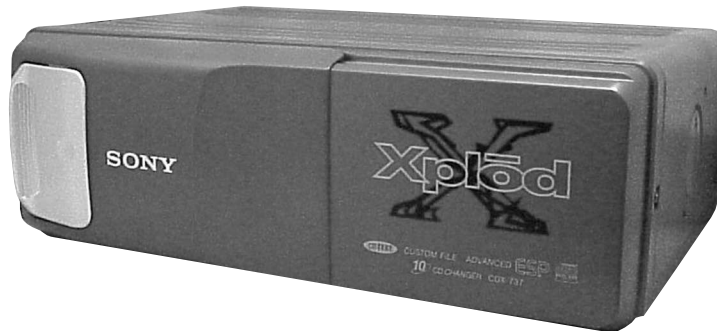


CDX-737

SERVICE MANUAL

US Model
Canadian Model
AEP Model
UK Model
E Model



Model Name Using Similar Mechanism	NEW
CD Drive Mechanism Type	MG-250D-137
Optical Pick-up Name	KSS-521A/J2N

SPECIFICATIONS

System	Compact disc digital audio system
Laser diode properties	Material: GaAlAs Wavelength: 780 nm Emission Duration: Continuous Laser out-put Power: Less than 44.6 μ W*
• This output is the value measured at a distance of 200 mm from the objective lens surface on the Optical Pick-up Block.	
Frequency response	10 – 20,000 Hz
Wow and flutter	Below the measurable limit
Signal-to-noise ratio	94 dB
Outputs	BUS control output (8 pins) Analog audio output (RCA pin)
Current drain	800 mA (during CD playback) 800 mA (during loading or ejecting a disc)
Operating temperature	-10°C to +55°C (14°F to 131°F)
Dimensions	Approx. 262 x 90 x 181.5 mm (10 ³ / ₈ x 3 ⁵ / ₈ x 7 ¹ / ₄ in.) (w/h/d) not incl. projecting parts and controls
Mass	Approx. 2.1 kg (4 lb. 10 oz.)
Power requirement	12 V DC car battery (negative ground)
Supplied accessories	Disc magazine (1) Parts for installation and connections (1 set)

Design and specifications are subject to change without notice.

COMPACT DISC CHANGER



SONY®

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SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK  OR DOTTED LINE WITH MARK  ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE  SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

SECTION 1 SERVICING NOTES

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic breakdown because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body. During repair, pay attention to electrostatic breakdown and also use the procedure in the printed matter which is included in the repair parts. The flexible board is easily damaged and should be handled with care.

Laser Diode Properties

- Material: GaAlAs
 - Wavelength: 780 nm
 - Emission Duration: continuous
 - Laser Output Power: less than 44.6 μW *
- * This output is the value measured at a distance of 200 mm from the objective lens surface on the Optical Pick-up Block.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Flexible Circuit Board Repairing

- Keep the temperature of the soldering iron around 270 °C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

Notes on chip component replacement

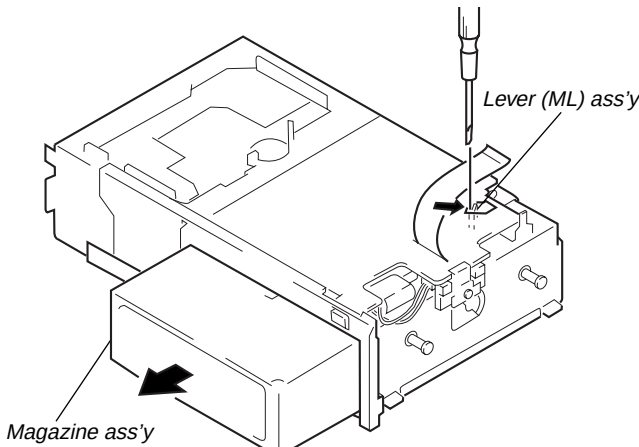
- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

DISC MAGAZINE GETTING OUT PROCEDURE ON THE POWER SUPPLY IS OFF

Remove the CASE (LOWER) assembly beforehand

- Press the lever (ML) ass'y to arrow direction.
- Removal the magazine ass'y.

Note: Take out the magazine only when the tray is completely within the magazine. If the disk or tray is sticking out, turn on the power and eject the magazine.



SECTION 2 GENERAL

This section is extracted from instruction manual.

Precautions

Moisture condensation

On a rainy day or in a very damp area, moisture may condense on the lenses inside the unit. Should this occur, the unit will not operate properly. In this case, remove the disc magazine and wait for about an hour until the moisture has evaporated.

Précautions

Remarque sur la condensation d'humidité

Par temps pluvieux ou dans des régions très humides, de la condensation peut se former sur les lentilles à l'intérieur de l'appareil. Dans ce cas, l'appareil ne fonctionne pas correctement. Dans ce cas, retirez alors le chargeur de disques et attendez environ une heure jusqu'à ce que la condensation se soit évaporée.

Precautions

Condensación de humedad

En los días lluviosos o en zonas muy húmedas, puede condensarse humedad en las lentes del interior de la unidad. Si esto ocurre, ésta no funcionará correctamente. En este caso, extraiga el cargador de discos y espere durante una hora aproximadamente hasta que la humedad se evapore.

使用前須注意

濕氣冷凝

雨天或在潮濕的地方，機器內部的透鏡上面可能發生濕氣冷凝。透鏡上有冷凝水分時，機器將不能正常地作用。此時，請取出碟碟匣，等候大約一小時讓冷凝水分完全蒸發乾燥。

Inserting a disc

1 With the arrow side facing up
Avec la partie fléchée tournée vers le haut
Con el lado de la flecha hacia arriba
有箭頭標誌的一面朝上

Labeled surface up
Etiquette vers le haut
貼標籤面朝上

10 discs, one in each tray
10 disques, un par plateau
10 碟碟匣，每一托盤裝一張

Use the supplied disc magazine or the disc magazine XA-250. The disc magazine XA-10B can not be used with this unit. If you use any other magazine, it may cause a malfunction.

Employ the disc magazine supplied or the XA-250. The disc magazine XA-10B cannot be used with this unit. If you use any other magazine, it may cause a malfunction.

Utilisez le magasin à disques fourni ou un magasin à disques XA-250. Vous ne pouvez pas utiliser de magasin à disques XA-10B avec cet appareil. L'utilisation d'un autre type de magasin à disques risque de provoquer un dysfonctionnement.

請使用附帶的碟碟匣或碟碟匣 XA-250。碟碟匣 XA-10B 是不適用於本單位的。您如果隨便使用其他碟碟匣，將可能引起故障的。

請使用附帶的碟碟匣或碟碟匣 XA-250。碟碟匣 XA-10B 是不適用於本單位的。您如果隨便使用其他碟碟匣，將可能引起故障的。

Notes

- To listen to an 8 cm (3 in.) CD, use the separately sold Sony CD adapter CSA-8. Be sure to always use the specified adapter, as failing to do so may cause a malfunction of the unit. If you use any other adapter, the unit may not operate properly. When using the Sony CD adapter, make sure the three catches on the adapter are firmly latched onto the 8 cm CD.
- Do not insert the Sony CD adapter CSA-8 in the magazine without a disc, as malfunction may result.

Remarques

- Pour écouter un disque de 8 cm (3 po.), utilisez l'adaptateur Sony CSA-8, vendu séparément. À l'exclusion de tout autre, pour éviter tout problème de fonctionnement. Si vous utilisez un autre adaptateur, l'appareil risque de ne pas fonctionner correctement. Quand vous utilisez l'adaptateur CD Sony, vérifiez que les trois griffes soient bien en prise sur le CD de 8 cm.
- Né pas insérer d'adaptateur CD Sony CSA-8 dans le chargeur sans disque, car cela pourrait provoquer un dysfonctionnement.

Notes

- Pour écouter un disque compact de 8 cm, utilisez l'adaptateur de disques compacts Sony CSA-8, que vous pouvez acquérir séparément. Assurez-vous d'utiliser toujours l'adaptateur spécifié, ya que si vous utilisez un autre adaptateur, l'appareil risque de ne pas fonctionner correctement. Quand vous utilisez l'adaptateur de disques compacts Sony, assurez-vous que les trois encoches de l'adaptateur soient fermement enclenchées sur le disque compact de 8 cm.
- N'insérez pas l'adaptateur de disques compacts Sony CSA-8 en l'adaptateur sans disque, ya que cela peut provoquer des pannes de fonctionnement.

註

- 要聽 8 cm CD 時，請用另售的 Sony CD 轉接器 CSA-8。一定要使用指定的轉接器，否則可能引起機器故障。如果您使用任何其他的轉接器，機器將可能不能正常地作用。您用 Sony 牌 CD 轉接器時，要確定轉接器上的三個卡扣是否穩穩地啮合好 8 cm CD。
- 不要將 Sony CD 轉接器 CSA-8 裝入沒有碟碟匣的碟碟匣中。

Insertion d'un disque

Inserción de discos

裝入一張唱碟

3 Disc magazine
Chargeur de disques
Cargador de discos
碟碟匣

To remove
Retrait
Extraction
取出

If the disc magazine does not lock properly
Take out the magazine, and after pressing the **EJECT** button, re-insert it.
Si vous ne pouvez pas fermer le chargeur de disques
Sortez le chargeur et, après avoir appuyé sur la touche **EJECT**, réinsérez-le.
Si el cargador de discos no se cierra correctamente
Extraiga el cargador, pulse el botón **EJECT** y vuelva a insertarlo.
如果碟碟匣沒有鎖定妥當
請取出碟碟匣，按下 **EJECT** 按鈕後再把它裝進去。

Use the unit with the door closed
Otherwise, foreign matter may enter the unit and contaminate the lenses inside the changer.
Utiliser cet appareil avec la trappe fermée
Sinon, des corps étrangers pourraient pénétrer dans l'appareil et encrasser les lentilles dans le lecteur.
Empie la unidad con la puerta cerrada
De lo contrario podrían entrar objetos extraños y contaminar las lentes del interior del cambiador.
請關上門使用機器
否則，會有塵埃進入機器弄髒換碟器內部的透鏡。

4

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請關上門使用機器
否則，會有塵埃進入機器弄髒換碟器內部的透鏡。

Notes

- When a disc magazine is inserted into the CD changer or the reset button of the connected car audio is pressed, the unit will automatically be activated and read the information on the CDs. When the information on all the CDs in the disc magazine has been read, the unit will automatically stop operation.

Remarque

- Quand un chargeur de disques est inséré dans le changeur de CD ou si la touche de réinitialisation de l'autoradio raccordé est enclenchée, l'appareil se met automatiquement en marche et reproduit les CD. Lorsque tous les CD du chargeur ont été reproduits, l'appareil s'arrête automatiquement.

Nota

- Cuando inserta un cargador de discos en el cambiador de discos compactos, o si está pulsado el botón de reposición del equipo de audio para automóvil conectado, la unidad se activará automáticamente y leerá la información de los discos compactos. Una vez leída la información de todos los discos compactos del cargador de discos, la unidad detendrá automáticamente la operación.

註

- 當把碟碟匣裝入 CD 換碟器或按下了連接著的汽車音響的重置按鈕時，機器即將自動重播（打開）並讀取 CD 上的資料。當讀完碟碟匣中所有 CD 上的資料時，機器即將自動停止操作。

Notes on the disc magazine

- Do not leave the disc magazine in locations with high temperatures and high humidity such as on a car dashboard or in the rear window where the disc magazine will be subjected to direct sunlight.
- Do not place more than one disc at a time onto one tray, otherwise the changer and the discs may be damaged.
- Do not drop the disc magazine or subject it to a violent shock.

Remarques sur le chargeur de disques

- Ne pas laisser le chargeur de disques dans un endroit très chaud ou très humide comme sur le tableau de bord ou sur la plage arrière de la voiture où il serait en plein soleil.
- Ne pas insérer plus d'un disque à la fois sur le plateau, sinon le changeur et les disques risquent d'être endommagés.
- Ne pas laisser tomber le chargeur de disques ni le cogner.

Notas sobre el cargador de discos

- No lo deje en lugares muy húmedos o con temperaturas altas, como en el salpicadero del automóvil o en la ventanilla trasera, expuesto a la luz solar directa.
- No inserte más de un disco en una bandeja de una vez, ya que en caso contrario el cambiador y los discos pueden dañarse.
- No lo deje caer ni lo exponga a golpes violentos.

唱碟匣須知

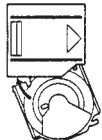
- 不要把碟碟匣放置在高溫、高濕的地方。例如放在汽車儀表板上或車後窗等處碟碟匣會直接受到陽光照射。
- 一個托盤上不要同時裝放一張以上的碟碟。否則，可能會損壞換碟器和碟碟。
- 別讓碟碟匣摔落地上或受到強烈的衝擊。

When the tray comes out
Normally, the tray will come out of the magazine. However, if they are pulled out of the magazine, it is easy to re-insert them.

Lorsque le plateau sort
En principe, les plateaux ne sortent pas du chargeur. Toutefois, s'ils sortent du chargeur, il est facile de les réinsérer.

Si la bandeja se sale
Normalmente, las bandejas no se salen del cargador. No obstante, si esto ocurre, pueden volver a insertarse con facilidad.

說出托盤時
通常，托盤是不會從碟碟匣中脫落的。但是萬一被拉出脫離碟碟匣，您可以很簡單地再把它裝插回去的。



With the cut-away portion of the tray facing you, insert the right corner of the tray in the slot, then push in the left corner until it clicks.

Nota
Do not insert the tray upside down or in the wrong direction.

Avec la portion découpée du plateau vous faisant face, insérez le coin droit du plateau dans la fente, puis enfoncez le coin gauche jusqu'au clic.

Remarque
Ne pas insérer le plateau à l'envers ou dans le mauvais sens.

Con la parte de corte de la bandeja hacia afuera, inserte la esquina derecha de dicha bandeja en la ranura y, a continuación, ejerza presión en la esquina izquierda hasta oír un chasquido.

Nota
No inserte la bandeja al revés o en la dirección incorrecta.

碟托盤有缺口的一邊朝著自己方向將托盤右角插入槽中，然後壓入左角至聽到卡搭聲響。

註
裝插托盤時，切勿插反了面或插方向。

Notes on compact discs

A dirty or defective disc may cause sound drop-outs during playback. To enjoy optimum sound, handle the disc as follows.

- Handle the disc by its edge, and to keep the disc clean, do not touch the unlabeled surface. (fig. A)
- Do not stick paper or tape on the disc. (fig. B)
- Do not expose discs to direct sunlight or heat sources such as hot air-ducts. Do not leave discs in a car parked in direct sunlight where there can be a considerable rise in the temperature inside the car. (fig. C)
- Before playing, clean the discs with an optional cleaning cloth. Wipe each disc in the direction of the arrows. (fig. D)
- Do not use solvents such as benzine, thinner, commercially available cleaners or antistatic spray intended for analog discs.

Notes on discs
If you use the discs explained below, the sticky residue can cause the CD to stop spinning and may cause malfunction or ruin your discs.

- Do not use second-hand or rental CDs that have a sticky residue on the surface (for example from peeled-off stickers or from ink, or glue leaking from under the stickers).
- There are paste residue. Ink is sticky. (fig. E)
- Stickers that are beginning to peel away, leaving a sticky residue. (fig. F)
- Do not use your CDs with labels or stickers attached.
- Labels are attached. (fig. G)

Remarques sur les disques compacts

- Un disque sale ou défectueux peut provoquer des pertes de son à la lecture. Manipuler le disque comme suit pour obtenir un son optimal.
- Manipuler le disque par son arête et le maintenir dans un état propre, ne pas le toucher sur la surface non imprimée. (fig. A)
- Ne pas coller de papier ou de bande adhésive sur le disque. (fig. B)
- Ne pas laisser les disques en plein soleil ou près d'une source de chaleur comme des conduits d'air chaud. Ne pas laisser les disques dans une voiture garée en plein soleil car la température de l'habitacle risque d'augmenter considérablement. (fig. C)
- Avant la lecture, essuyer les disques avec un chiffon de nettoyage en option. Essuyer chaque disque dans le sens des flèches. (fig. D)
- Né pas utiliser de solvants tels que de la benzine, du diluant, des produits de nettoyage vendus dans le commerce ou de vaporisateurs anti-statiques destinés aux disques analogiques.

Remarques sur les disques
Si vous utilisez les disques décrits ci-dessous, le résidu adhésif risque de provoquer l'arrêt de la rotation du CD et d'entraîner un dysfonctionnement ou d'endommager vos disques.

- N'utilisez pas de CD de seconde main ou de location qui présentent des résidus adhésifs à la surface (par exemple d'étiquettes décollées ou d'encre, de colle dépassant de l'étiquette).
- Résidus de colle. L'encre colle. (fig. E)
- N'utilisez pas de CD de location avec d'anciennes étiquettes qui commencent à se décoller.
- Les étiquettes qui commencent à se décoller laissent des résidus adhésifs. (fig. F)
- N'utilisez pas vos CD avec des étiquettes ou des autocollants apposés dessus.
- Les étiquettes sont fixées. (fig. G)

Notas sobre discos compactos

- Es posible que se produzca ausencia de sonido durante la reproducción, si el disco es sucio o es defectuoso. Para disfrutar de una calidad de sonido óptima, utilice el disco de la siguiente forma.
- Maneje el disco por los bordes. Para mantenerlo limpio, no toque la superficie sin etiqueta. (fig. A)
- No adhiera papeles ni cinta sobre el disco. (fig. B)
- No exponga los discos a la luz solar directa ni a fuentes térmicas, como conductos de aire caliente. No deje los discos en un automóvil aparcado bajo la luz solar directa donde pueda producirse un considerable aumento de temperatura en el interior de dicho automóvil. (fig. C)
- Antes de la reproducción, limpie los discos con un paño de limpieza opcional en la dirección de las flechas. (fig. D)
- No utilice disolventes como bencina, diluyentes, productos de limpieza disponibles en tiendas del ramo ni aerosoles antiestáticos destinados a discos analógicos.

Notas sobre los discos
Si emplea los discos descritos a continuación, el residuo adherente puede causar que el CD deje de girar y producir fallos de funcionamiento o dañar los discos.

- No utilice discos compactos de segunda mano o de alquiler que tengan residuos adherentes en la superficie (por ejemplo, de adhesivos despegados o tinta, o de restos de pegamento de los adhesivos).
- Residuos adherentes. Tinta adherente. (fig. E)
- No utilice discos compactos de alquiler con etiquetas viejas que estén comenzando a despegarse.
- Adhesivos que empiezan a despegarse, dejando un residuo adherente. (fig. F)
- No emplee discos compactos con etiquetas o adhesivos fijados.
- Etiquetas adheridas. (fig. G)

雷射唱碟須知

唱碟髒了或變形，可能會在放音時發生聲音低落現象。為保持良好的音質條件，請按照如下所述正確地拿唱碟。

- 抓握唱碟邊緣以保持唱碟清潔，不要接觸沒貼標籤的碟碟面。
- 不要在碟碟上貼紙條或貼膠帶。（圖 A）
- 不要讓唱碟暴露於直射陽光下或熱氣管等熱源邊，也不要將唱碟放在停駐在炎曬下的汽車裡，因為那樣會升到很高的溫度。（圖 C）
- 放音前，請用選購的清潔用布蘸乾淨碟碟-如圖所示應沿順所指方向擦拭。（圖 D）
- 不可利用溶劑，稀薄劑，市售的清潔劑或模擬式碟碟用的抗靜電噴射劑等溶劑清潔唱碟。

唱碟須知
如果使用下面所述唱碟，附留在碟碟上的黏膠液會導致 CD 停止旋轉，甚至可能導致機器故障或毀壞唱碟。

- 有未乾印泥或殘餘黏膠液。（圖 E）
- 別用那些標籤被剝離的出組 CD 唱碟。（圖 F）
- 標籤部分剝離，留下黏性膠液。（圖 G）
- 別用新貼了標籤或紙條的 CD。
- 貼紙標籤。（圖 G）



Installation

Precautions

- Choose the mounting location carefully, observing the following:
 - The unit is not subject to temperatures exceeding 55°C (131°F) (such as in a car parked in direct sunlight).
 - The unit is not subject to direct sunlight.
 - The unit is not near heat sources (such as heaters).
 - The unit is not exposed to rain or moisture.
 - The unit is not exposed to excessive dust or dirt.
 - The unit is not subject to excessive vibration.
 - The fuel tank should not be damaged by the tapping screws.
 - There should be no wire harnesses or pipes under the place where you are going to install the unit.
 - The spare tire, tools or other equipment in or under the trunk should not be interfered with or damaged by the screws or the unit itself.
- Be sure to use only the supplied mounting hardware for a safe and secure installation.
- Use only the supplied screws.
- Make holes of $\phi 3.5$ mm ($\frac{7}{32}$ in.) only after making sure there is nothing on the other side of the mounting surface.

How to install the unit

The brackets ① provide two positions for mounting, high and low. Use the appropriate screw holes according to your preference.

Horizontal installation

1

Vertical installation

1

Suspended installation

When the unit is to be installed under the rear tray etc. in the trunk compartment, make sure the following provisions are made.

- Choose the mounting location carefully so that the unit can be installed horizontally.
- Make sure the unit does not hinder the movement of the torsion bar spring etc. of the trunk lid.

1

Inclined installation

After installing the unit, align the dials with one of the marks so that the arrows are as vertical as possible.

Note
Be sure to align the left and right dials with the same mark.

Installation

Précautions

- Choisir l'emplacement de montage en tenant compte des observations suivantes:
 - Appareil non soumis à des températures dépassant 55°C (131°F) (comme dans une voiture parkée au soleil).
 - Appareil non soumis au rayonnement solaire direct.
 - Appareil à l'écart de sources de chaleur (comme des radiateurs).
 - Appareil non exposé à la pluie ou à l'humidité.
 - Appareil non exposé à des poussières ou à des souillures en excès.
 - Appareil non exposé à des vibrations excessives.
 - Vérifier que le réservoir d'essence ne risque pas d'être endommagé par les vis taradeuses.
 - Il ne doit pas y avoir de faisceau de fils ou de tuyaux à l'emplacement du montage.
 - Vérifier que l'appareil ou les vis ne risquent pas d'endommager ou de gêner la roue de secours, les outils, ou autre objet dans le coffre.
- Pour garantir la sécurité de l'installation, utiliser uniquement le matériel de montage fourni.
- Utilisez uniquement les vis fournies.
- Ne percez les trous de 3,5 mm ($\frac{7}{32}$ po.) qu'après vous être assuré qu'il n'y avait rien de l'autre côté de la surface de montage.

Installation de l'appareil

Les supports ① offrent deux positions de montage, haut et bas. Utilisez les trous de vissage appropriés en fonction de vos préférences.

Installation horizontale

1

Installation verticale

1

Installation suspendue

Si l'appareil doit être installé sous la plage arrière dans le coffre, par exemple, observer les précautions suivantes.

- Bien choisir l'emplacement pour pouvoir installer l'appareil à l'horizontale.
- Vérifier que l'appareil ne gêne pas les mouvements du ressort de fermeture du coffre, entre autres.

1

Installation inclinée

Après avoir installé l'appareil, alignez les disques sur un repère de façon à ce que les flèches soient dans la position la plus verticale possible.

Remarque
Veuillez aligner les disques gauche et droite sur le même repère.

Instalación

Precauciones

- Elija cuidadosamente el lugar de montaje y tenga en cuenta lo siguiente:
 - La unidad no queda sometida a temperaturas superiores a los 55°C (como en un automóvil aparcado a la luz solar directa).
 - La unidad no queda sometida a la luz solar directa.
 - La unidad no queda cercana a fuentes térmicas (como aparatos de calefacción).
 - La unidad no queda expuesta a la lluvia o a la humedad.
 - La unidad no queda expuesta a polvo o suciedad excesivos.
 - La unidad no queda sometida a vibraciones excesivas.
 - El depósito de combustible no deberá dañarse con los tornillos autorroscantes.
 - No deberá haber mazos de conductores ni tubos debajo del lugar donde vaya a instalar la unidad.
 - La rueda de repuesto, las herramientas, u otros equipos situados dentro o debajo del portaequipajes no deberán verse interferidos ni dañados por los tornillos ni por la propia unidad.
- Para realizar una instalación segura, emplee solamente la ferretería de montaje suministrada.
- Utilice sólo los tornillos suministrados.
- Antes de hacer los orificios de $\phi 3,5$ mm, compruebe que no haya nada en el otro lado de la superficie de montaje.

Instalación de la unidad

Los soportes ① proporcionan dos posiciones de montaje, alta y baja. Utilice los orificios para tornillo apropiados según sus preferencias.

Instalación horizontal

2

Instalación vertical

2

Instalación suspendida

Si va a instalar la unidad debajo de la bandeja trasera, etc., del maletero, tenga en cuenta lo siguiente:

- Elija el lugar de montaje cuidadosamente de forma que sea posible instalar la unidad horizontalmente.
- Asegúrese de que la unidad no dificulte el movimiento del muelle de la barra de torsión, etc., de la tapa del maletero.

2

Instalación inclinada

Una vez instalada la unidad, alinee los diales de forma que una de las marcas de las flechas se encuentre en la posición más vertical posible.

Nota
Asegúrese de alinear los diales izquierdo y derecho con la misma marca.

安裝

使用前須注意

- 請參照下列各項仔細選擇安裝位置：
 - 機器不能遭受超過 55°C 的溫度 (例如停駐於炎陽下的汽車內)。
 - 機器不可直接照射到陽光。
 - 機器不可靠近熱源 (例如加熱器等)。
 - 不要讓機器暴露雨中或潮濕處。
 - 不要把機器放在多塵或污穢的地方。
 - 別讓機器受到強烈的震動。
 - 小心別讓收絲螺釘損傷了燃油箱。
 - 注意安裝機器位置下面不要有電線束或配管。
 - 行李箱中或下面的備胎、工具或其他設備的取存不可受到機器的安裝螺釘或機器本身的干擾或損傷。
- 為了安裝確實和安全，請限使用附帶的安裝五金件。
- 限使用附帶的螺絲釘。
- 務請在確認安裝面的另一側沒有任何其他物品之後開 $\phi 3.5$ mm 的孔。

如何安裝機器

支架①提供了兩種安裝位置，高和低。跟您的考慮，請使用合適的螺孔。

水平安裝

2

豎直安裝

2

懸掛安裝

機器安裝在後行李箱托架下面等位置時，必須作好如下的準備。

- 小心地選擇能水平地安裝機器的位置。
- 確認機器是否不會阻礙後行李箱蓋的扭桿彈簧等。

2

傾斜安裝

安裝好機器之後，請旋轉度盤對準標記中的一個使箭頭盡可能呈垂直方向的位置。

註
左、右度盤一定要對準同一標記。

Connections/Connexions/Conexiones/ 連接

For details, refer to the Installation/Connections manual of the car audio.
Pour plus de détails, consulter le manuel d'installation/connexions de l'autoradio.
Con respecto a los detalles, consulte el manual de instalación/conexiones del sistema de audio del automóvil.
詳細請參考產品的安裝／連接說明。

Connection diagram/Schéma de connexion/Diagrama de conexión/ 接線圖

Note
For connecting two or more changers, the XA-C30 source selector (optional) is necessary.

Remarque
Pour raccorder deux ou plusieurs changeurs, le sélecteur de source XA-C30 (en option) est nécessaire.

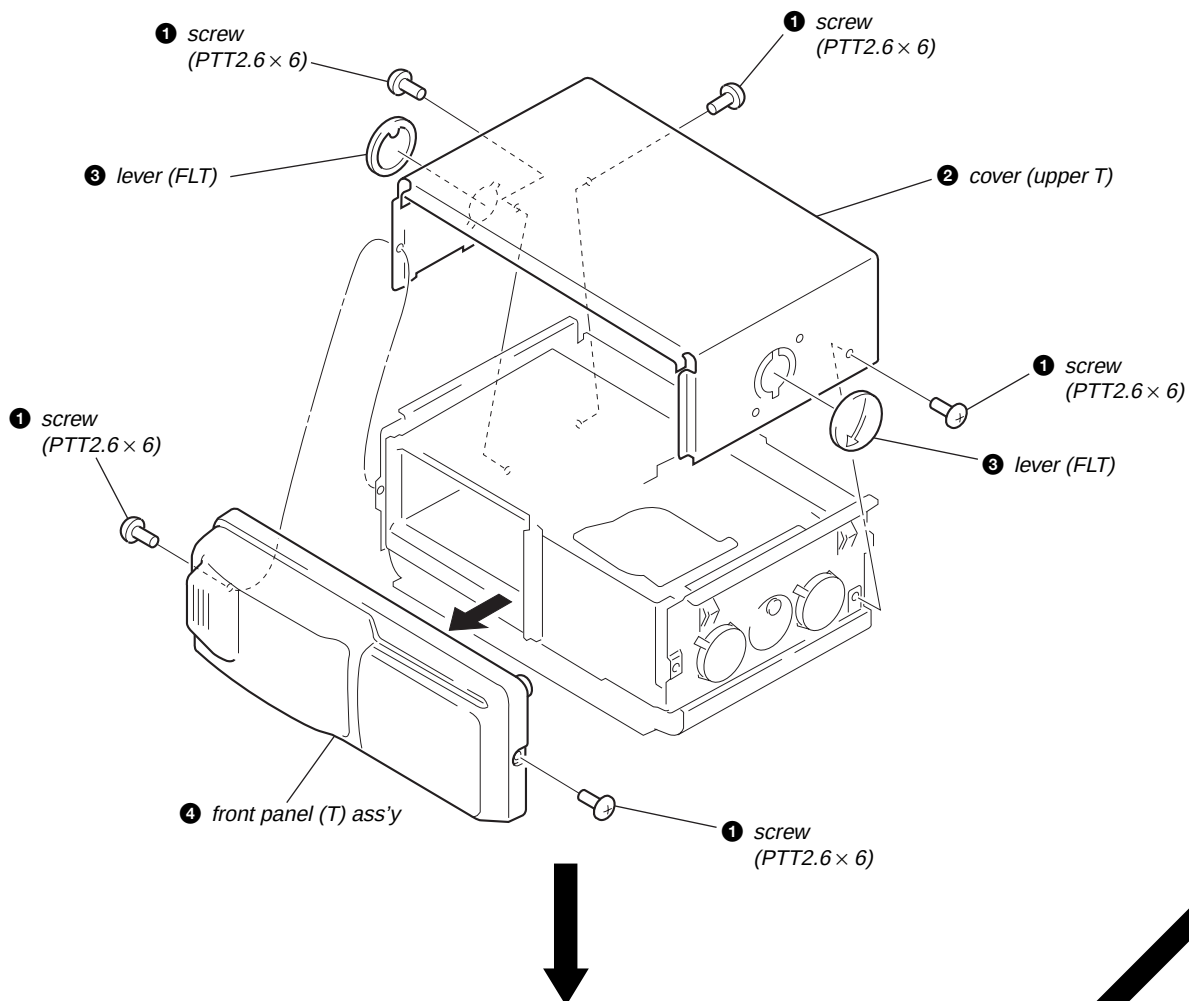
Nota
Si deben conectar dos o más cambiadores, es preciso utilizar un selector de fuente XA-C30 (opcional).

註
要是接兩個以上的換碟器時，您便須利用 XA-C30 磁碟選擇器（選配件）。

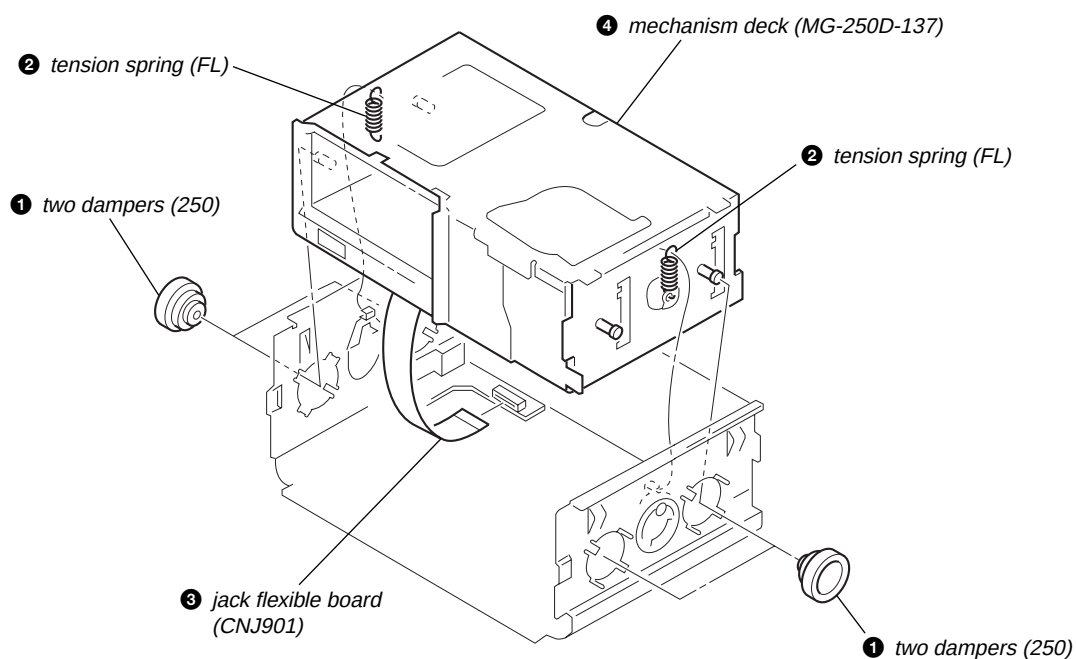
SECTION 3 DISASSEMBLY

Note: Follow the disassembly procedure in the numerical order given.

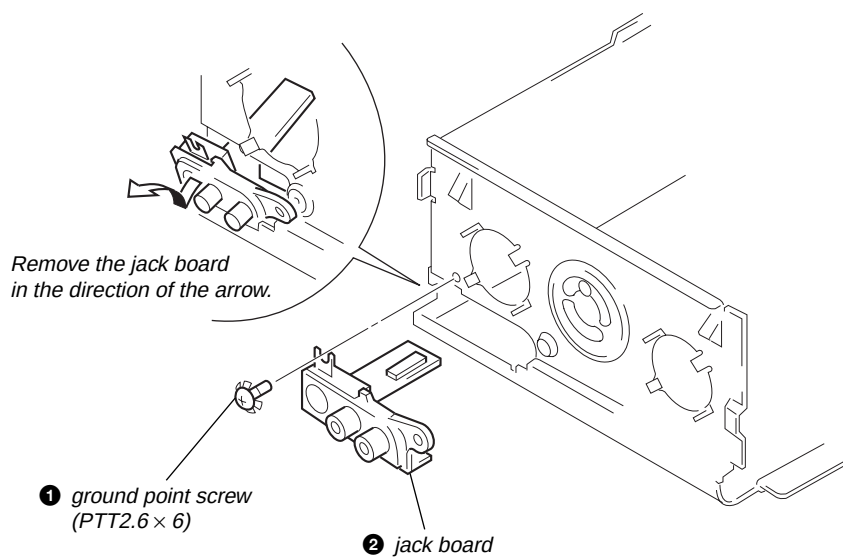
COVER (UPPER T), FRONT PANEL ASS'Y



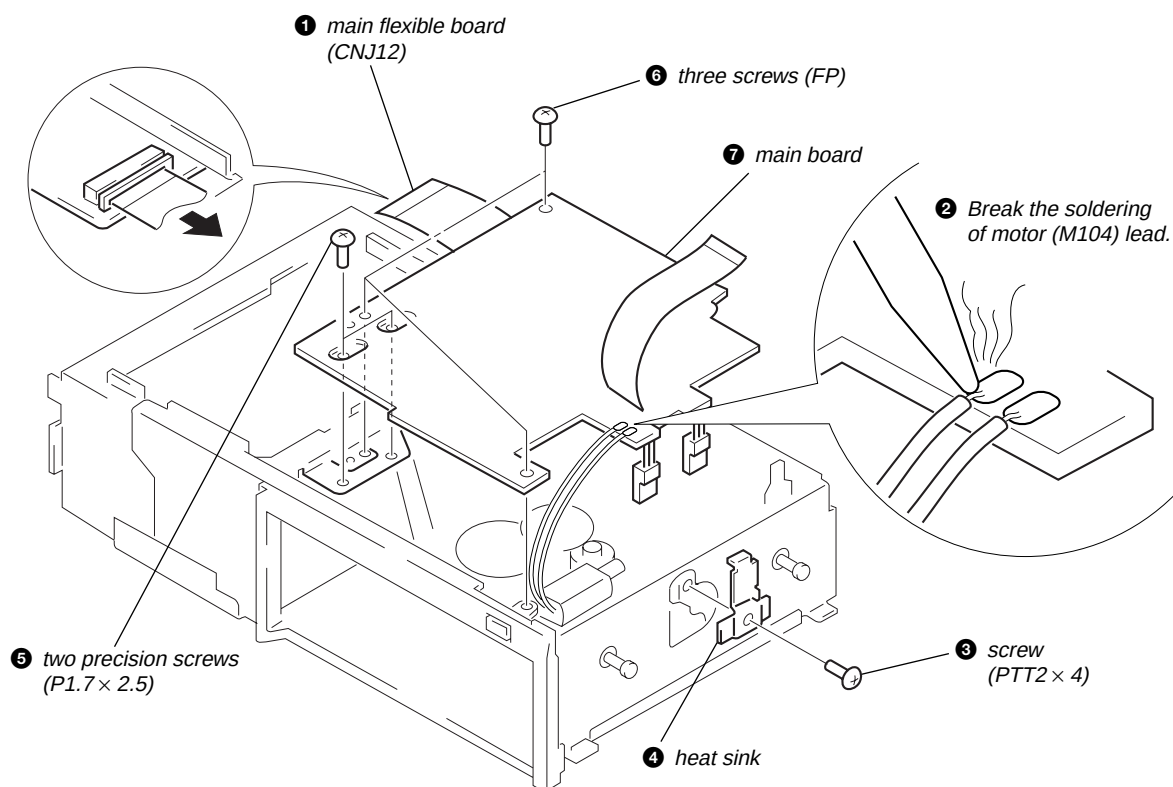
MECHANISM DECK (MG-250D-137)



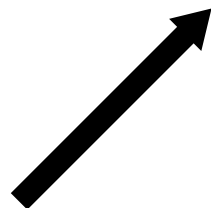
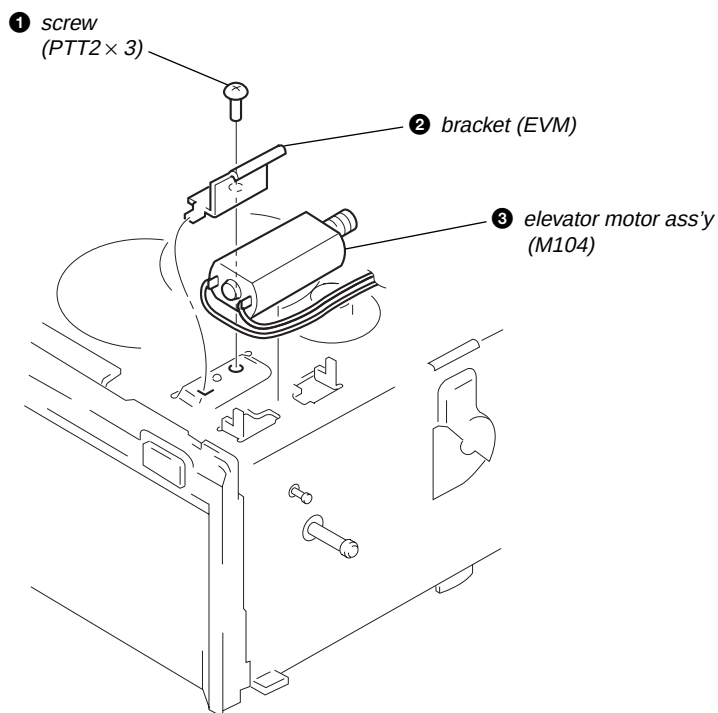
JACK BOARD



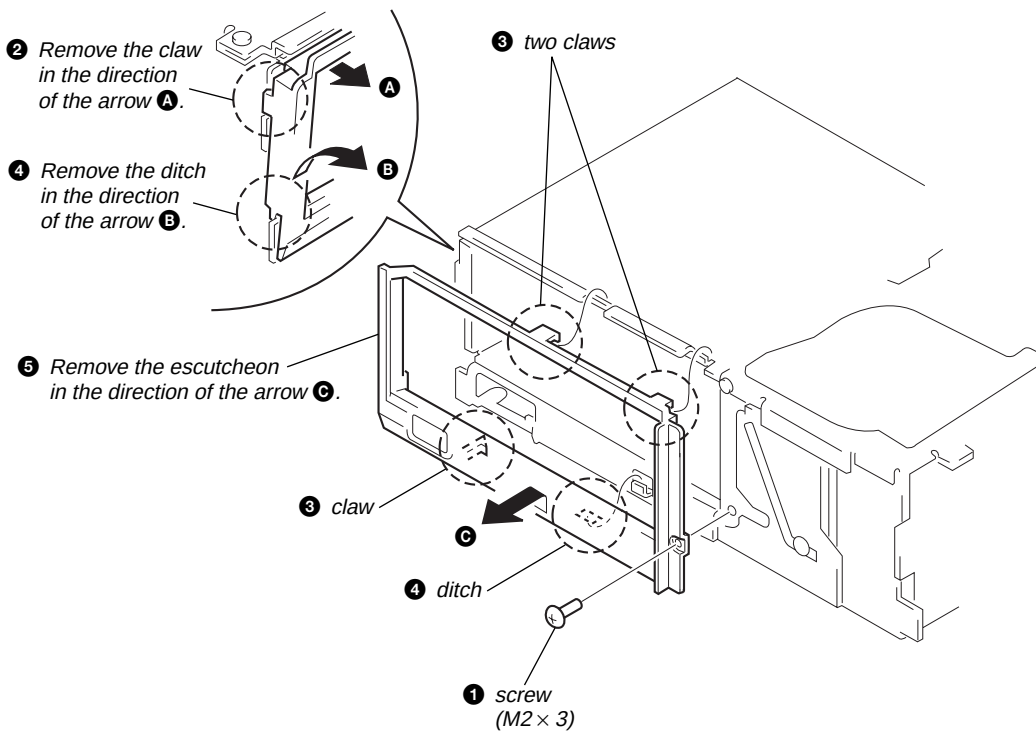
MAIN BOARD



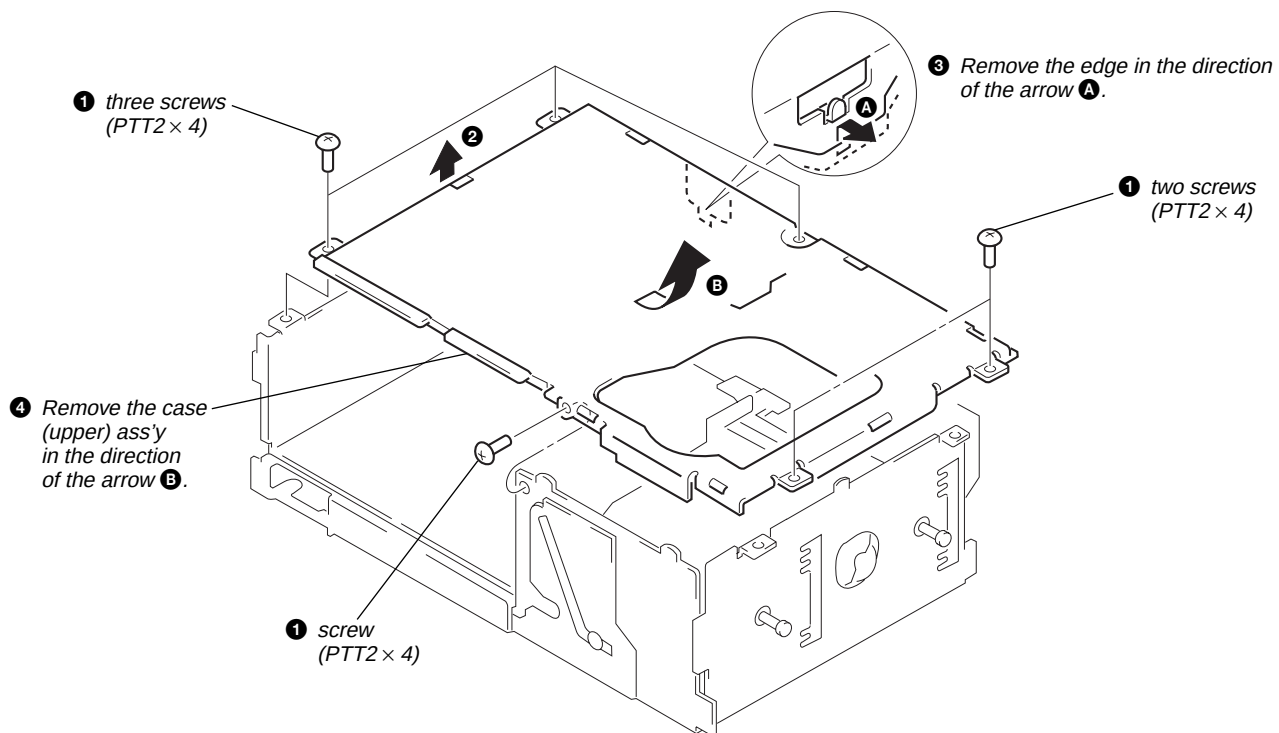
ELEVATOR MOTOR ASS'Y (M104)



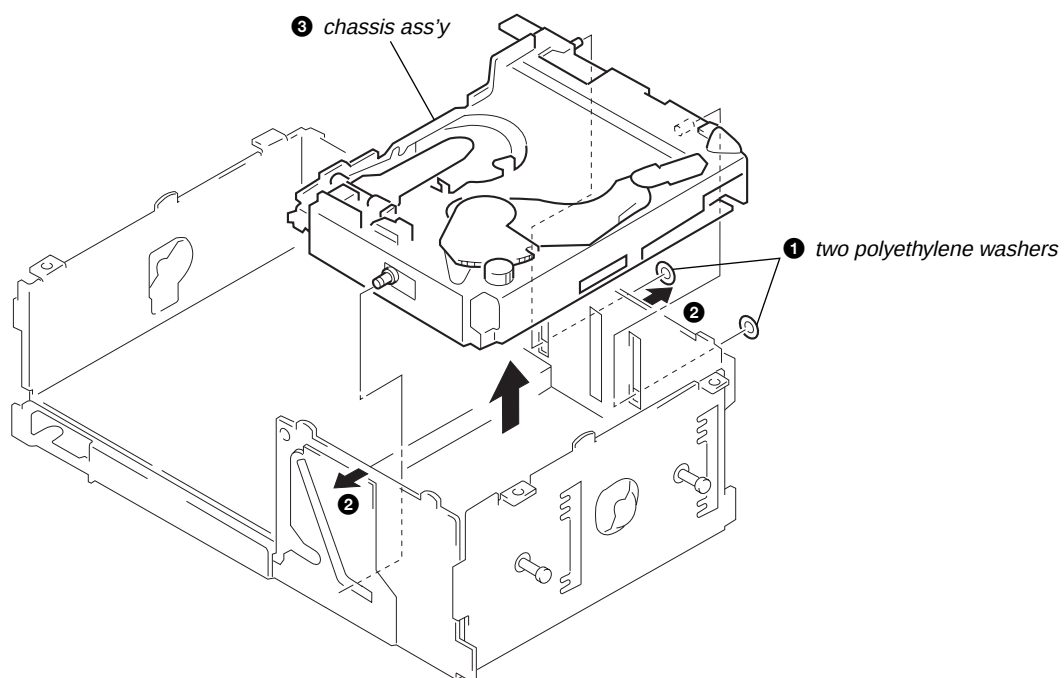
ESCUTCHEON



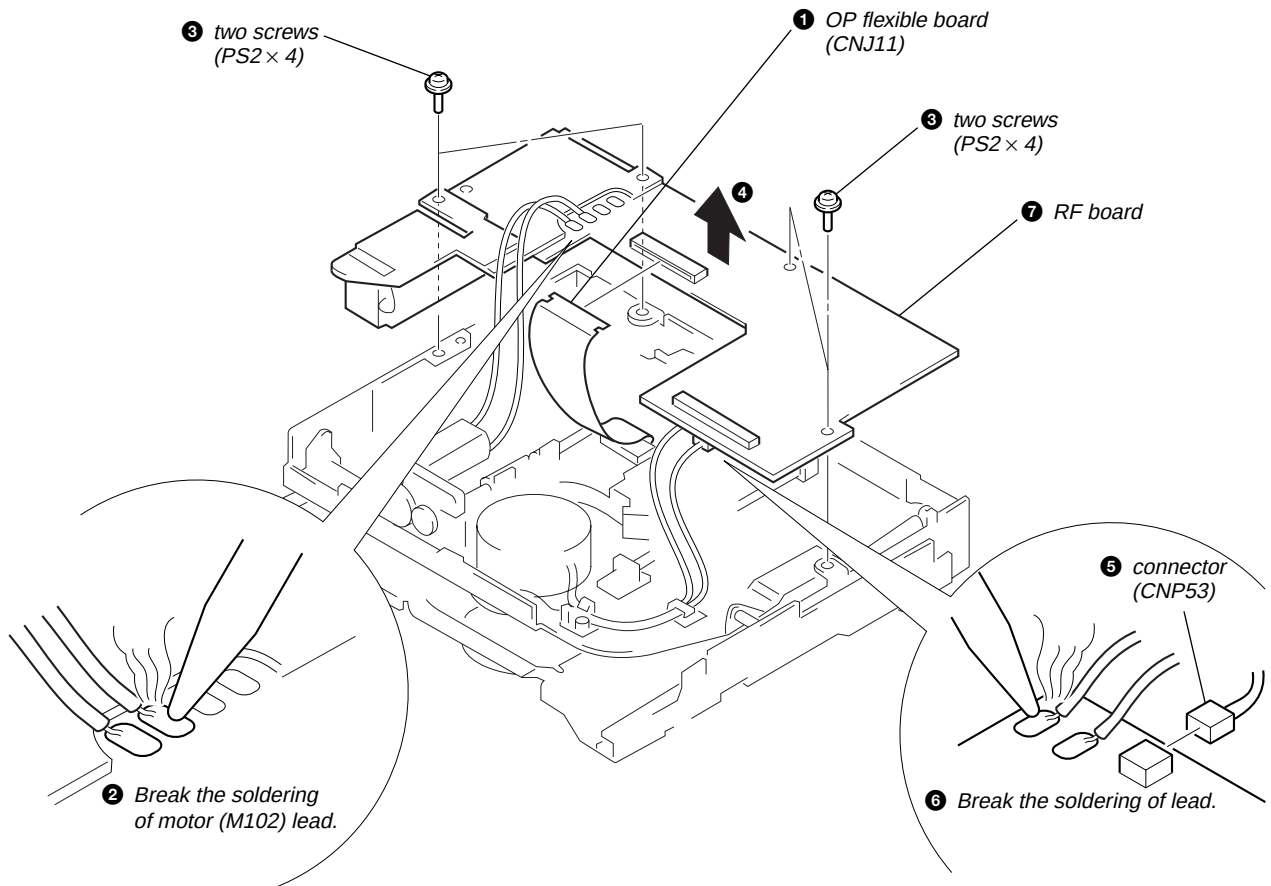
CASE (UPPER) ASS'Y



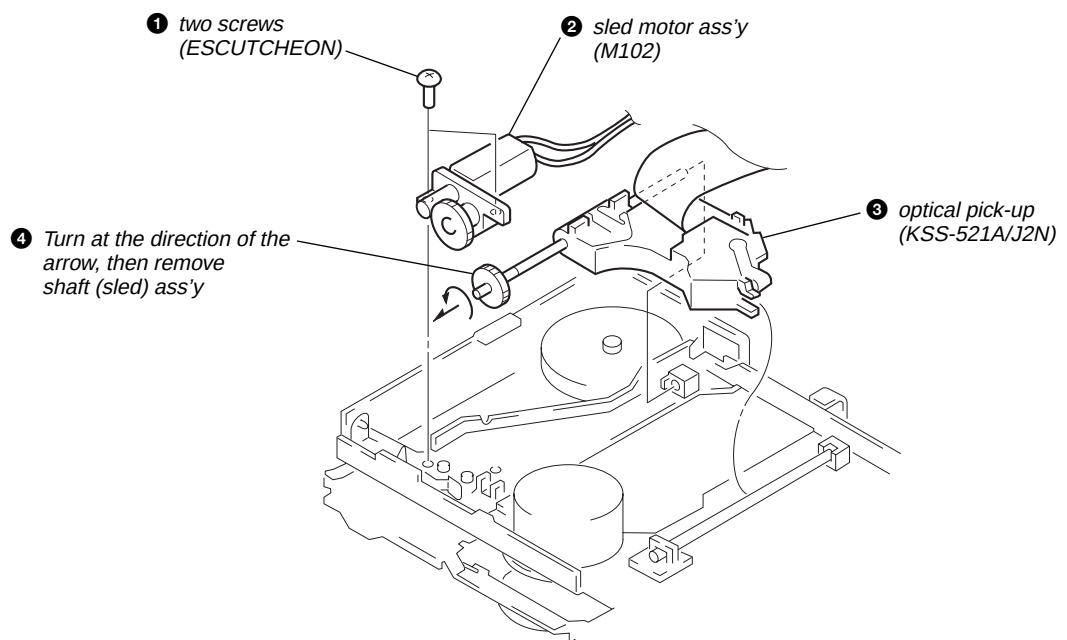
CHASSIS ASS'Y



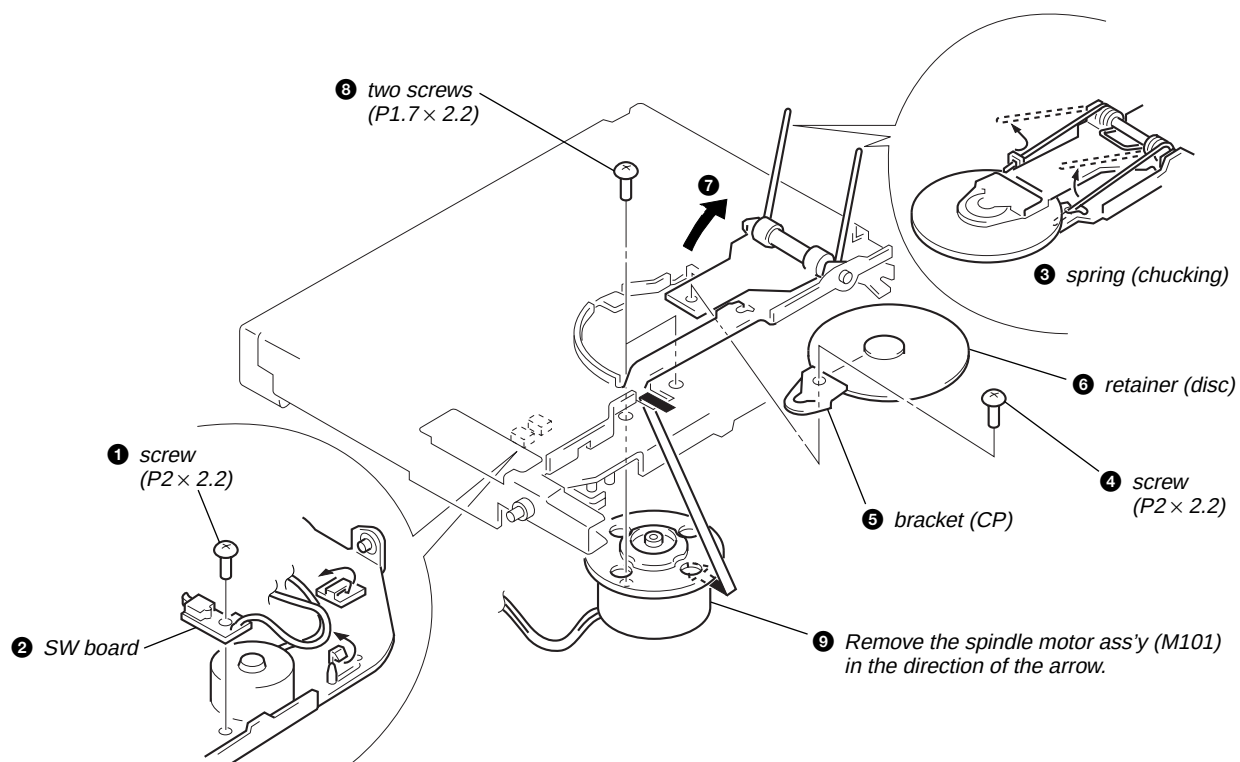
RF BOARD



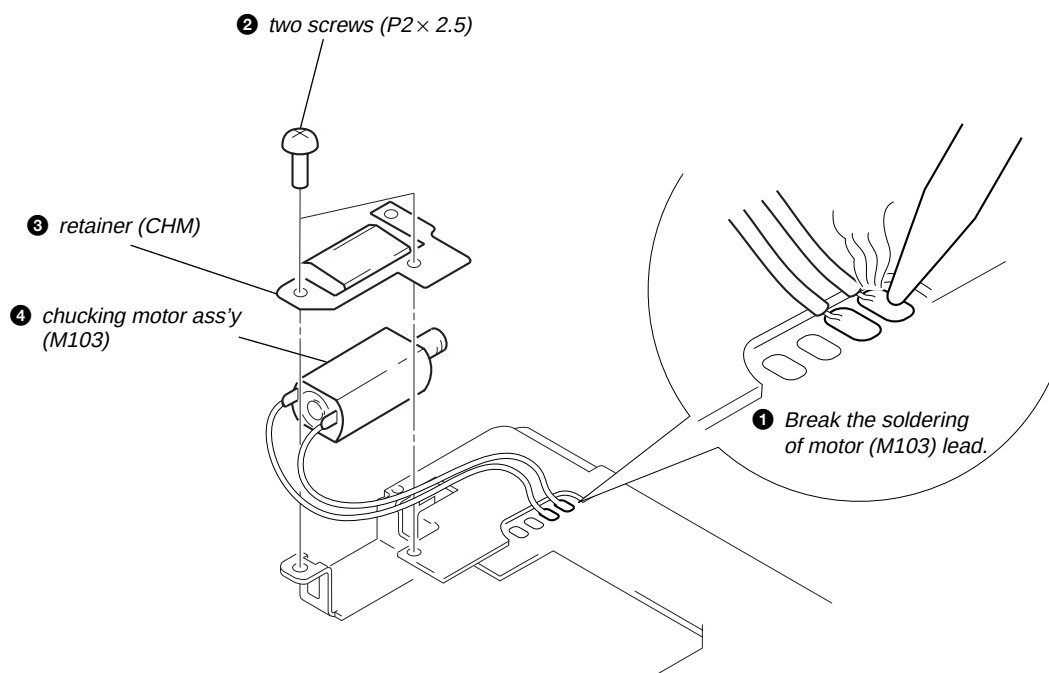
SLED MOTOR ASS'Y (M102), OPTICAL PICK-UP (KSS-521A/J2N)



SW BOARD, SPINDLE MOTOR ASS'Y (M101)



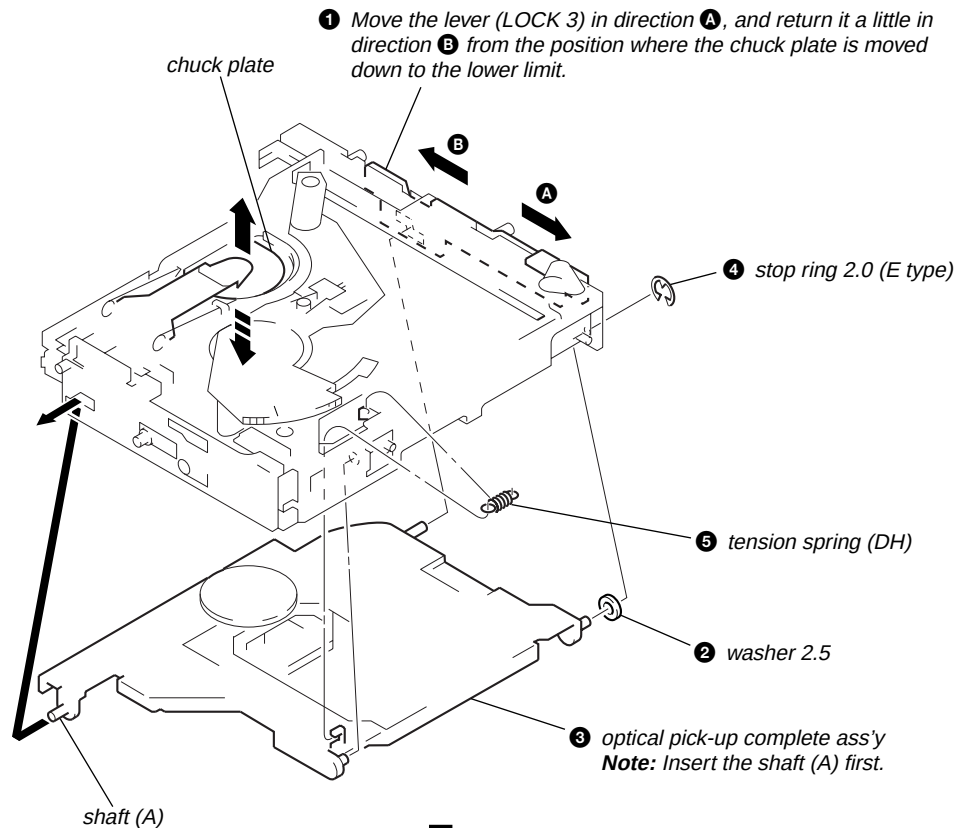
CHUCKING MOTOR ASS'Y (M103)



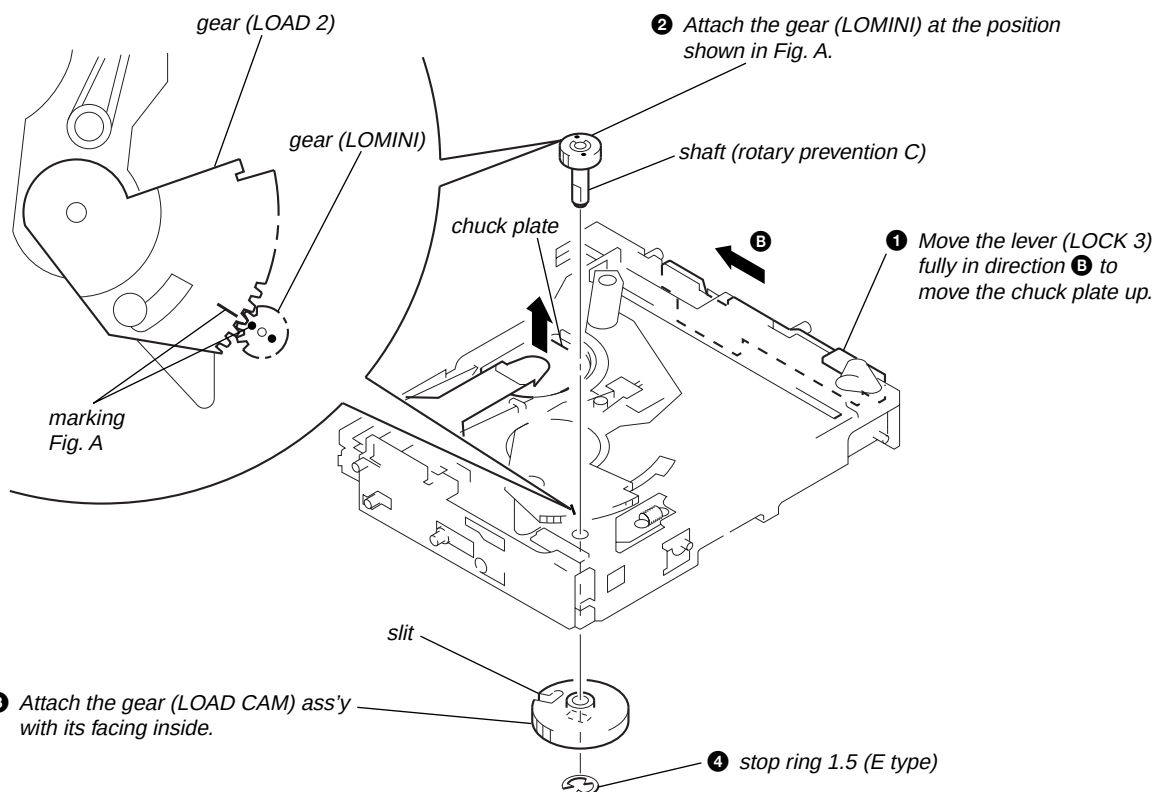
SECTION 4 MECHANISM DECK ASSEMBLY

Note: Follow the assembly procedure in the numerical order given.

OPTICAL PICK-UP COMPLETE ASS'Y

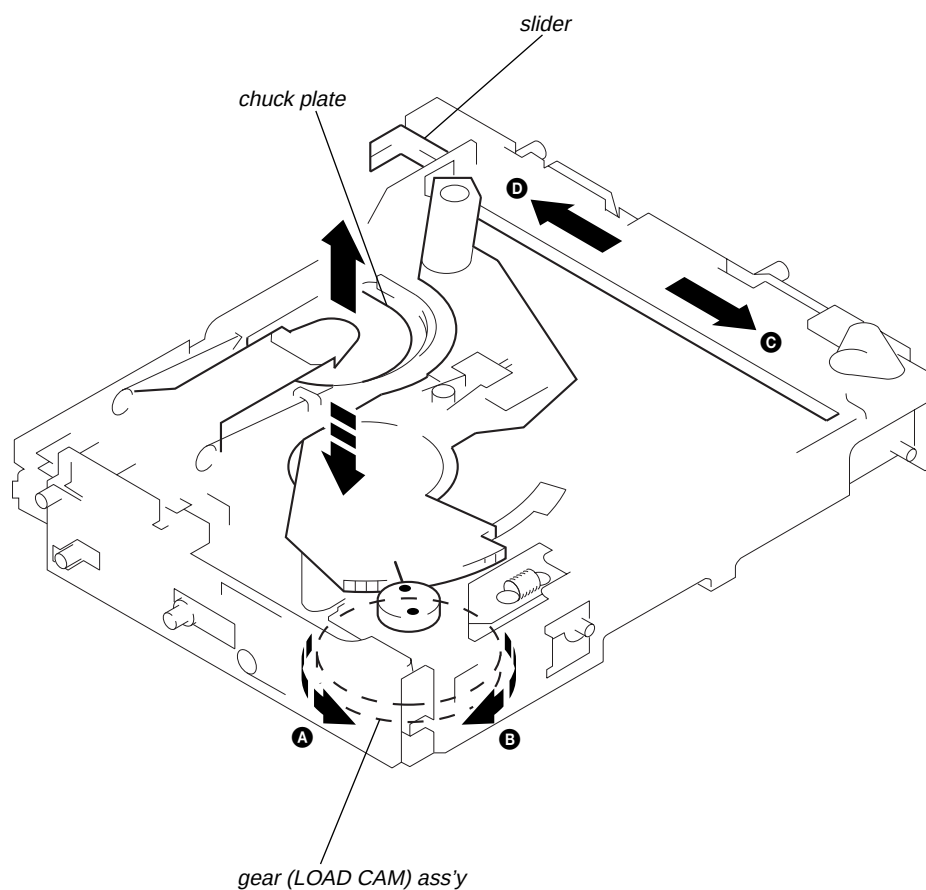


GEAR (LOMINI) / (LOAD CAM) ASS'Y



OPERATION CHECK

- 1 Confirm that the slider moves in direction **C** to move down the chuck plate if the gear (LOAD CAM) is rotated in direction **A** or the chuck plate moves up and the slider moves in direction **D** if the gear is rotated in direction **B**.

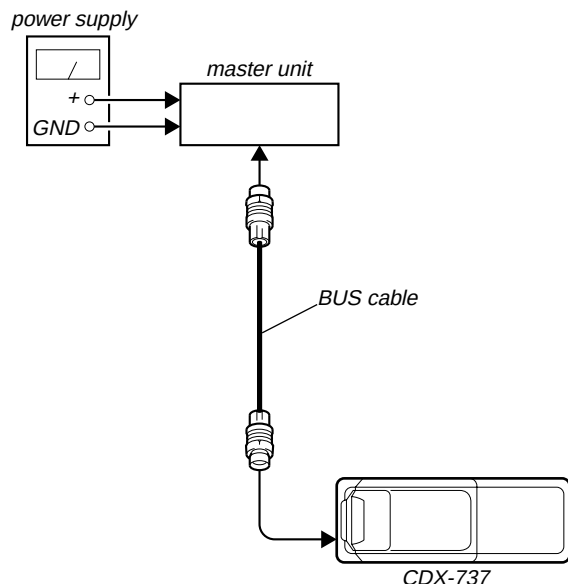


SECTION 5 MECHANICAL ADJUSTMENTS

• Elevator Height (Address) Adjustment

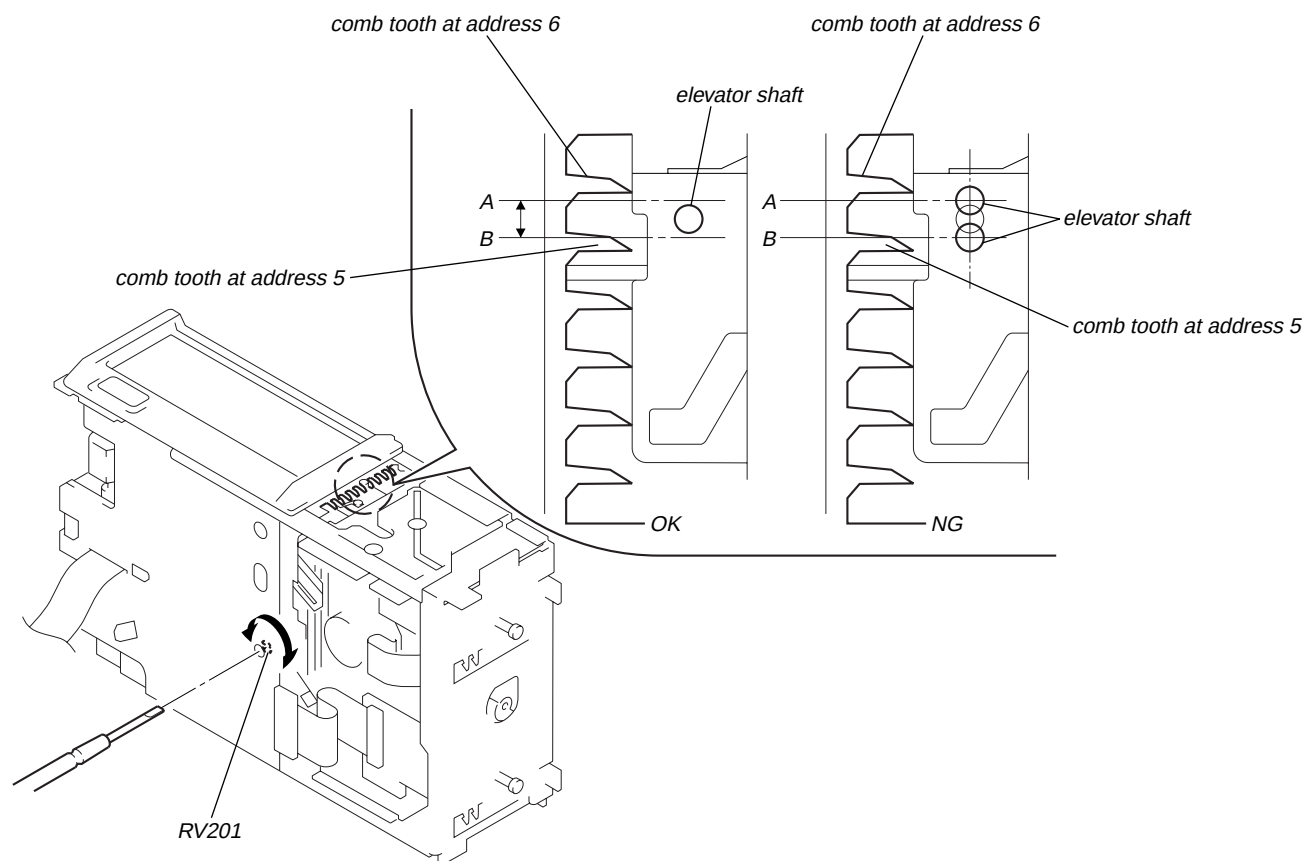
Note: This adjustments is necessary when the system controller (IC201), variable resistor (RV201), slider (R), slider (L), or chassis (ELV) was replaced for any repair.

Connection:



Adjustment Method:

1. Connect this set to the master unit (e.g. MDX-C7970/C7970R), load a disc magazine, and place the set vertically as shown below.
2. Connect the regulated power supply to the master unit, and turn the power on.
3. Press the DISC button on the master unit and select DISC 5.
4. At this time, if the elevator shaft does not position between comb teeth A and B at addresses 5 and 6 as shown below, adjust the following.
5. Press repeatedly the DISC + and – buttons on the master unit so that the elevator shaft moves from address 6 to address 5, or from 5 to 6. At this time, adjust RV201 on the main board so that the elevator shaft positions smoothly between comb teeth A and B.
6. Further, place the set horizontally and make same adjustment as mentioned above.
7. After adjustment at addresses 5 to 6 is finished, check all operations from addresses 1 to 10 with the set placed vertically and horizontally respectively to confirm that the elevator shaft positions in a range between comb teeth A to B.



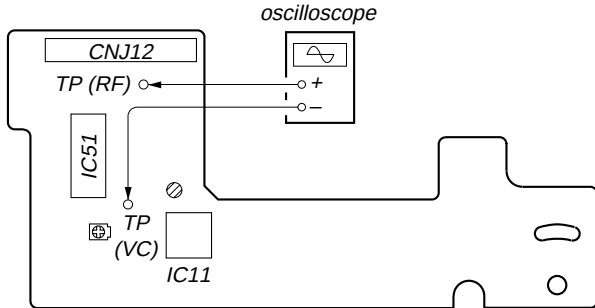
SECTION 6 ELECTRICAL ADJUSTMENTS

Note:

1. Perform adjustments as given.
2. Power supply voltage: DC14.4 V (more than 3A).

• FOCUS BIAS CHECK

– RF BOARD (Conductor Side) –



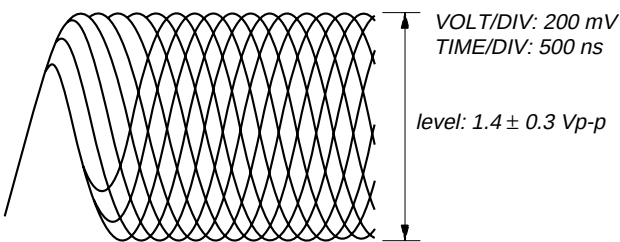
Procedure:

1. Connect the oscilloscope to TP (RF) and TP (VC) on the RF board.
2. Put the set into play mode by loading the disc.
3. Confirm that oscilloscope waveform is clear and check RF signal level is correct or not.

Note:

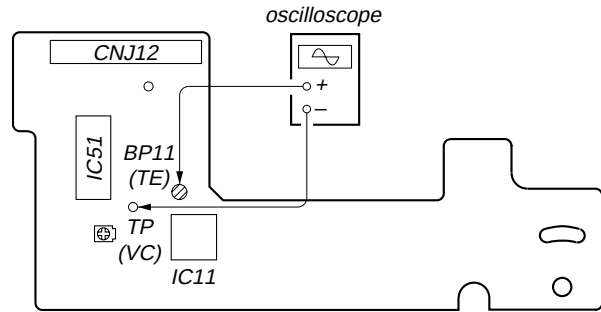
Clear RF signal waveform means that the shape “◇” can be clearly distinguished at the center of the waveform.

RF signal waveform



• TRACKING OFFSET CHECK

– RF BOARD (Conductor Side) –

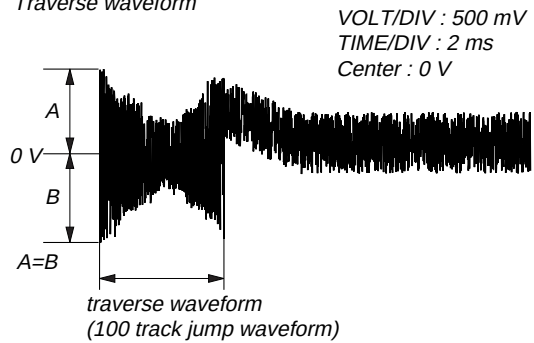


Procedure:

1. Connect the oscilloscope to BP11 (TE) and TP (VC) on the RF board.
2. Put the set into play mode by loading the disc.
3. Press the **◀◀ AMS ▶▶▶** button, and check the traverse waveform*.
4. Confirm that the oscilloscope waveform is symmetrical on the top and bottom in relation to 0 V dc, and check this level.

* Traverse waveform: This is the tracking error wave form appears when crossing the track.

Traverse waveform

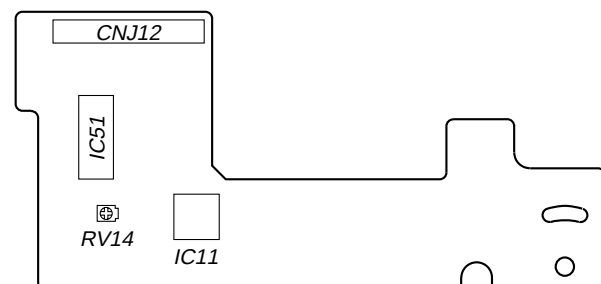


• **FOCUS GAIN ADJUSTMENT
(COARSE ADJUSTMENT)**

This adjustment is to be performed when replacing the following parts.

- Optical Pick-up Block
- RV14

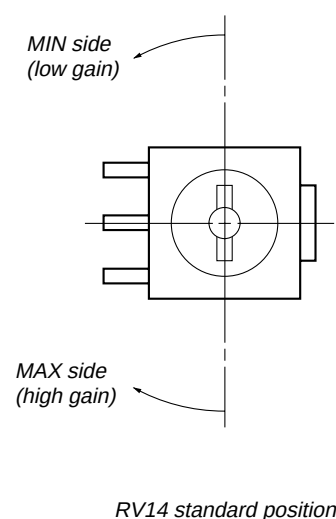
– **RF BOARD (Conductor Side) –**



Procedure:

1. Set RV14 (RF board) to the standard position.
2. Check that there is not an abnormal amount of operation noise (white noise) from the 2-axis device. If there is, turn RV14 slightly clockwise.

– **RF BOARD (Conductor Side) –**



• **When gain is lowered...**

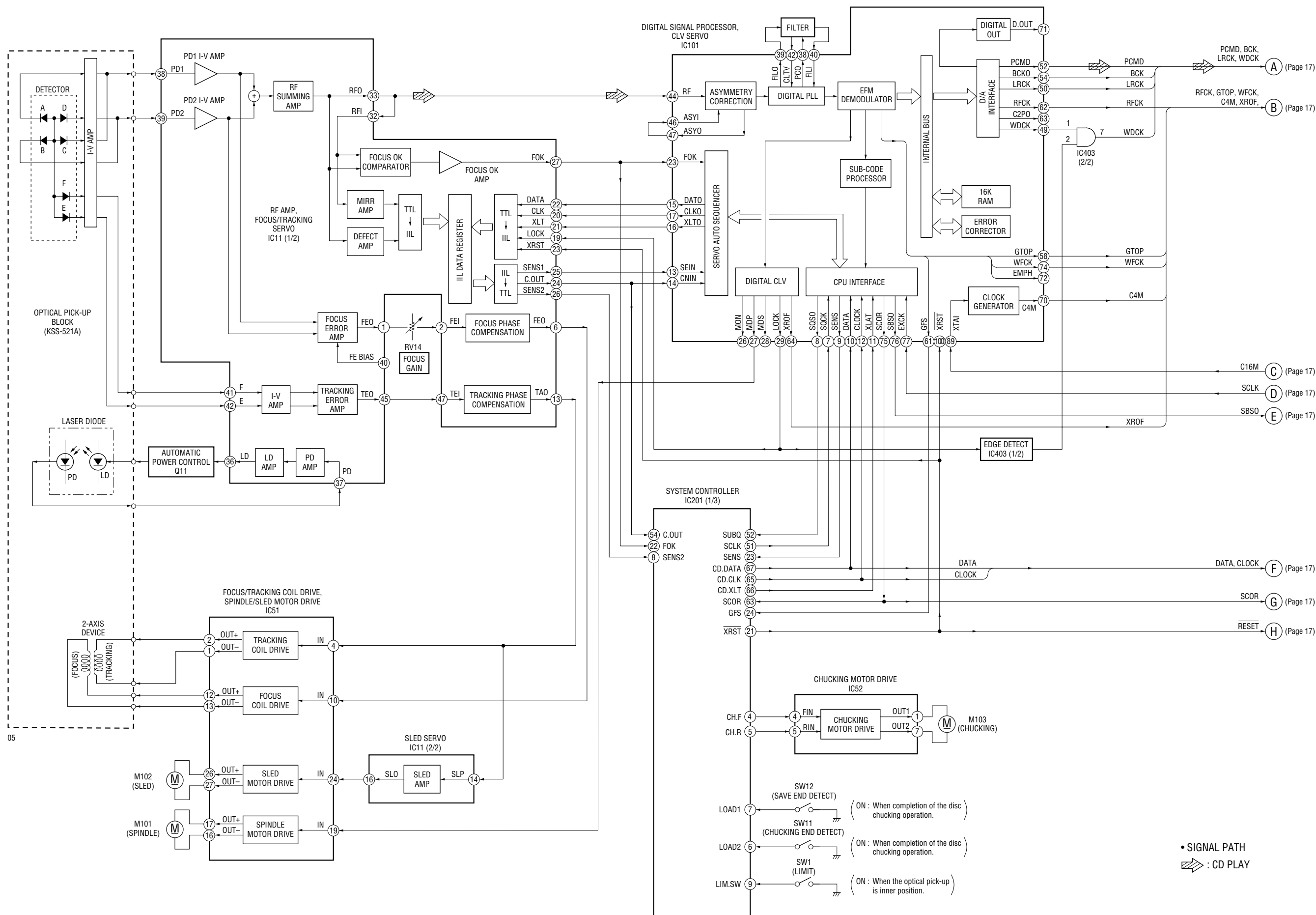
The set does not play because of no focus operation.

• **When gain is highered...**

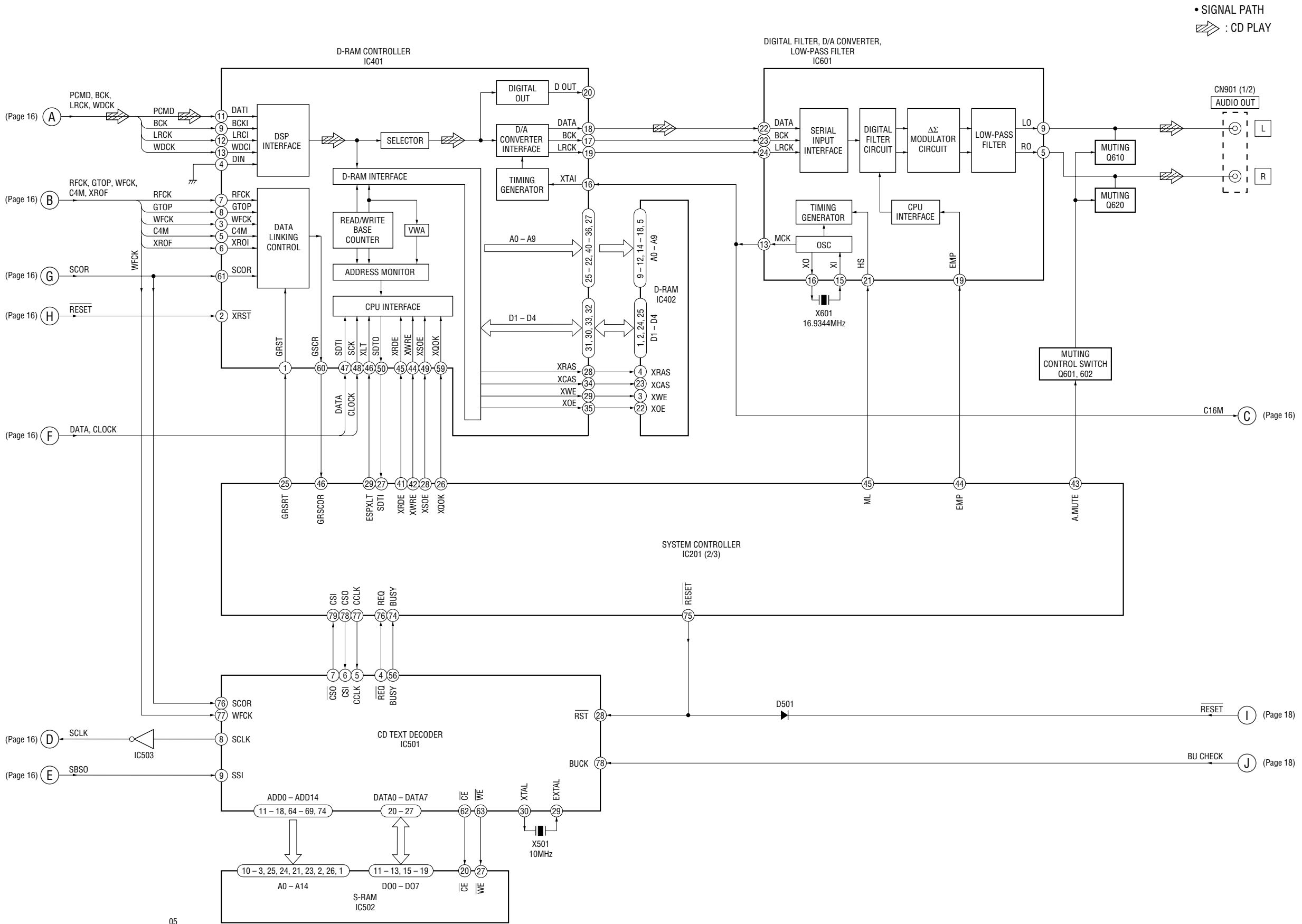
Operation noise is heard due to a scratch or a dust, then operation will be unstable.

SECTION 7 DIAGRAMS

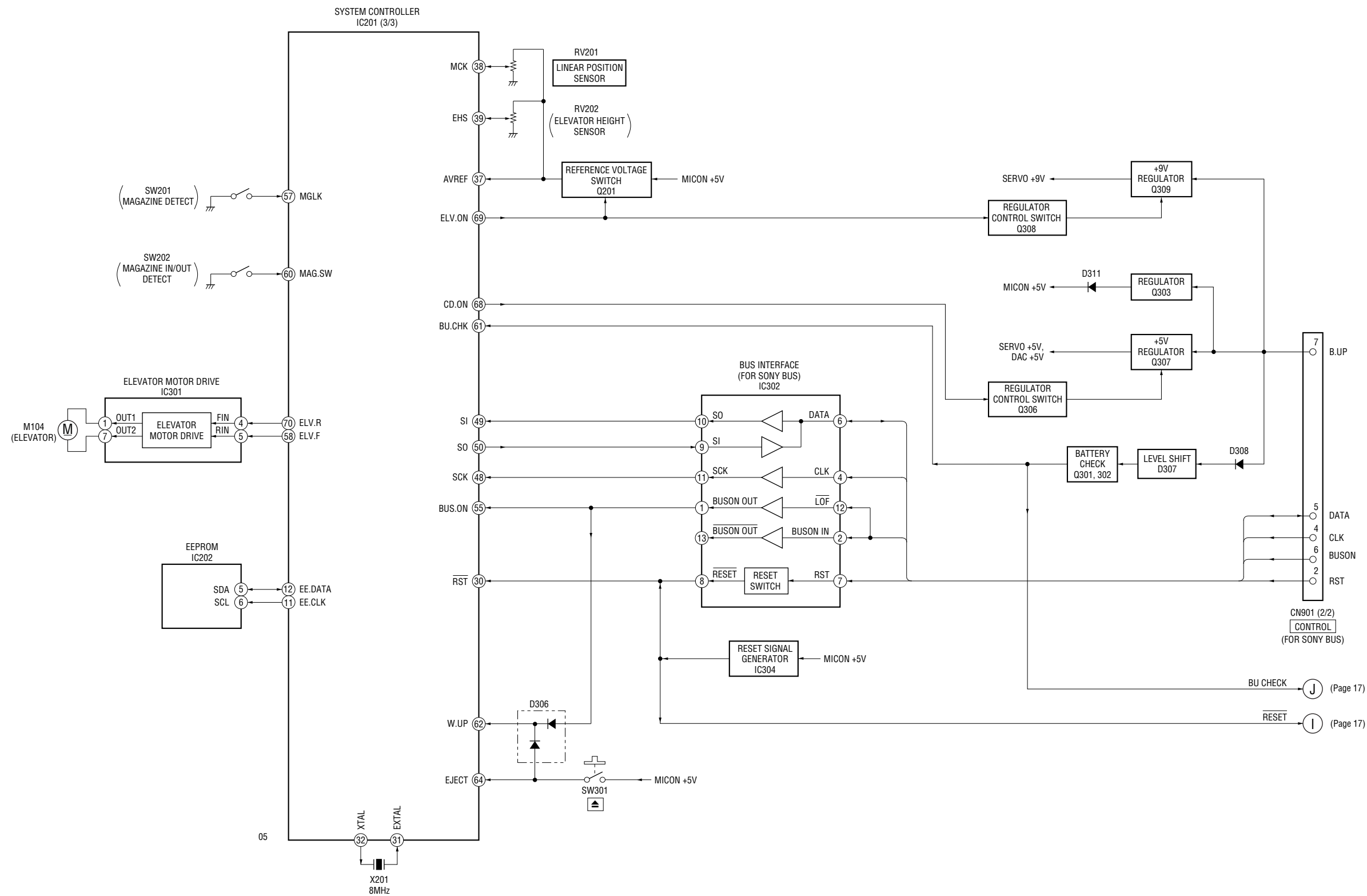
7-1. BLOCK DIAGRAM – SERVO Section –



7-2. BLOCK DIAGRAM – MAIN Section –



7-3. BLOCK DIAGRAM – BUS CONTROL/POWER SUPPLY Section –



7-4. NOTE FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

Note on Printed Wiring Board:

- : parts extracted from the component side.
- : parts extracted from the conductor side.
- : Through hole.
- ▨ : Pattern from the side which enables seeing.
(The other layers' patterns are not indicated.)

Caution:	
Pattern face side:	Parts on the pattern face side seen from the pattern face are indicated.
Parts face side:	Parts on the parts face side seen from the parts face are indicated.

Note on Schematic Diagram:

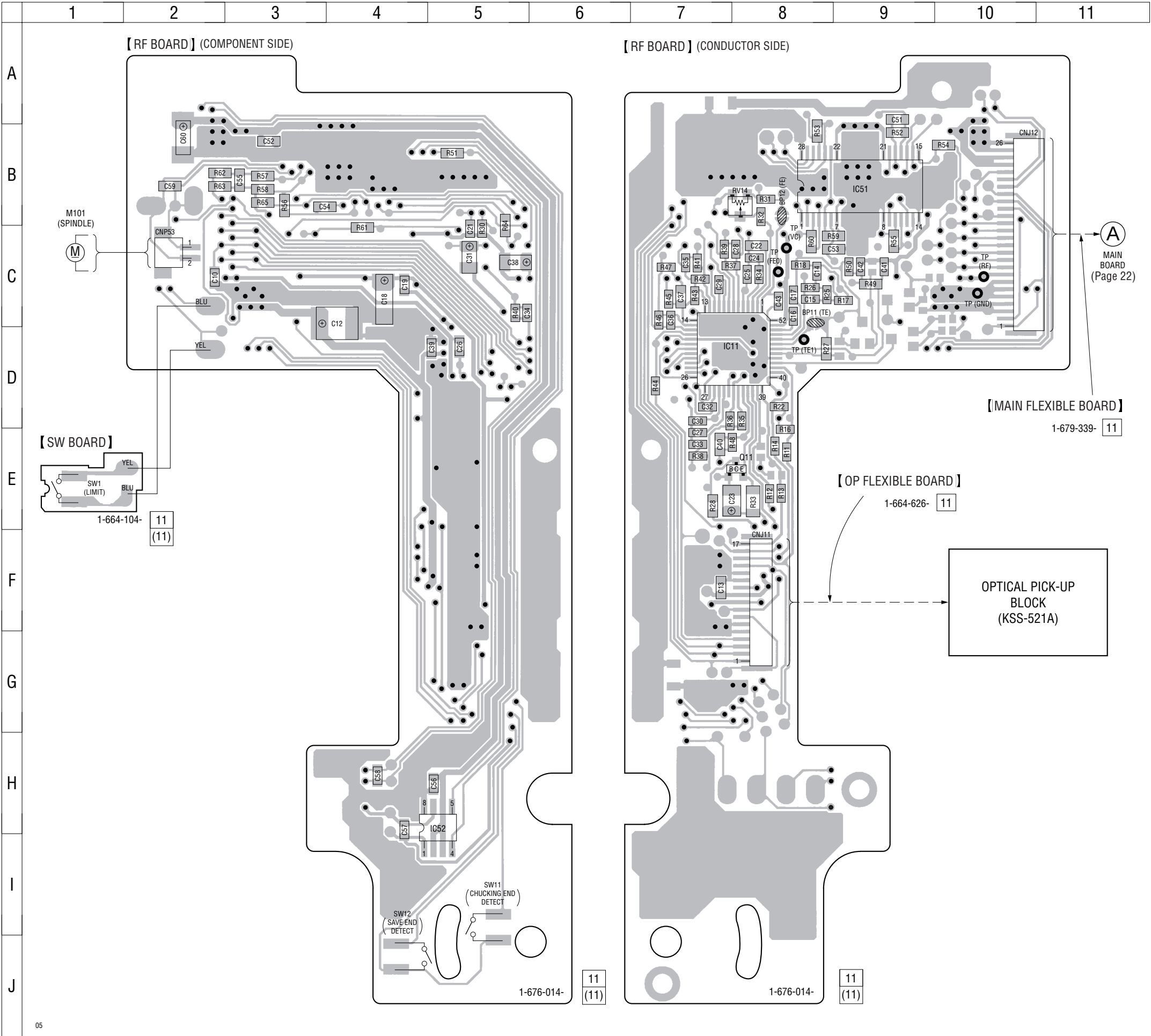
- All capacitors are in μF unless otherwise noted. pF: $\mu\mu\text{F}$. 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $\frac{1}{4}\text{ W}$ or less unless otherwise specified.
- $\triangle$: internal component.
- : panel designation.

Note: The components identified by mark $\triangle$ or dotted line with mark $\triangle$ are critical for safety. Replace only with part number specified.	Note: Les composants identifiés par une marque $\triangle$ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.
--	--

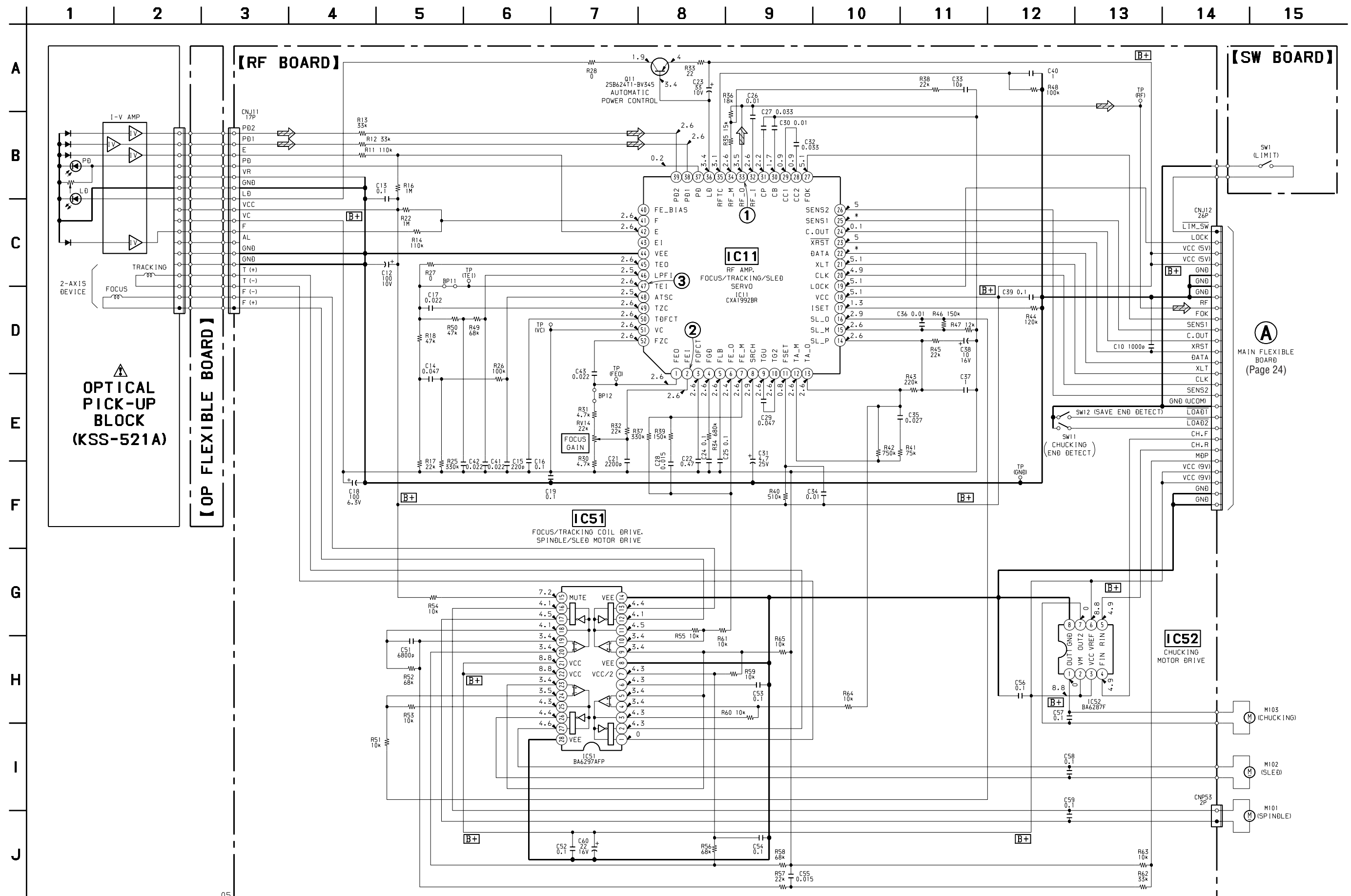
- B + : B+ Line.
- : adjustment for repair.
- Power voltage is dc 14.4V and fed with regulated dc power supply from CD changer controller.
- Voltages and waveforms are dc with respect to ground under no-signal conditions.
no mark : CD PLAY
* : Impossible to measure
- Voltages are taken with a VOM (Input impedance 10 M Ω). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
 $\Rightarrow$: CD PLAY

7-5. PRINTED WIRING BOARDS – RF/SW Boards –

Ref. No.	Location
IC11	D-7
IC51	B-9
IC52	H-4
Q11	E-8



7-6. SCHEMATIC DIAGRAM – RF/SW Boards – • See page 27 for Waveforms. • See page 29 for IC Block Diagrams.



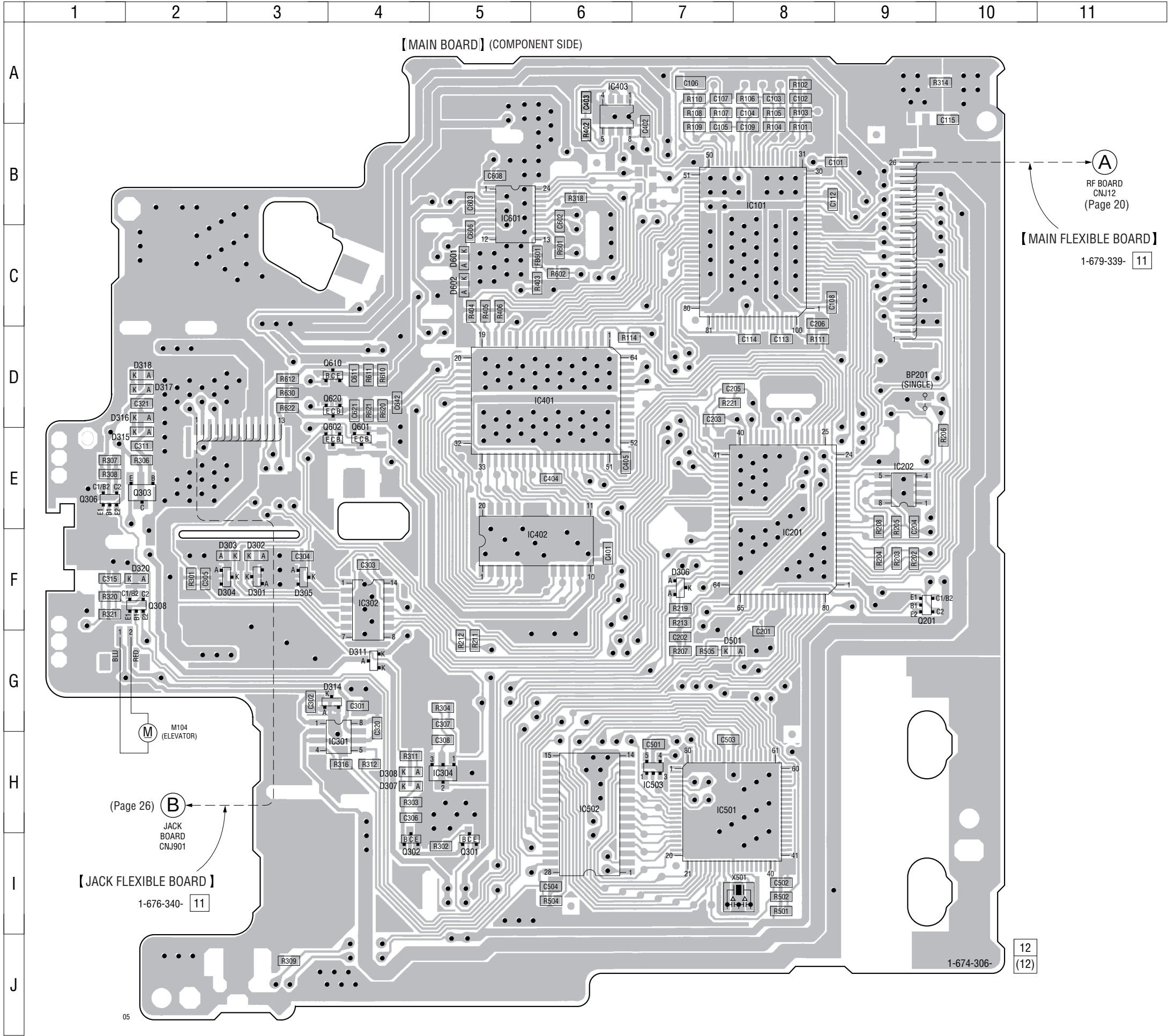
The components identified by mark or dotted line with mark are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

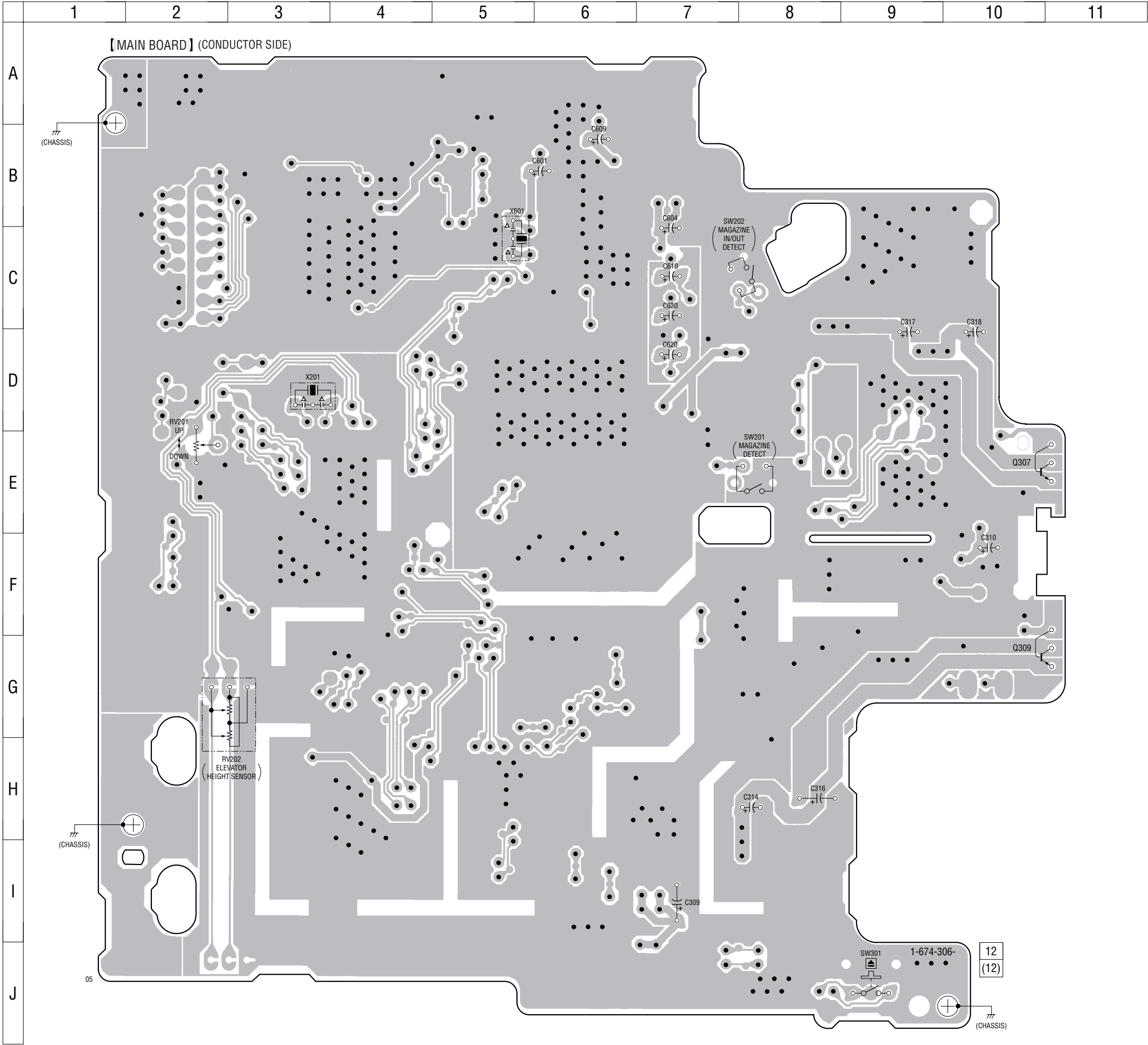
7-7. PRINTED WIRING BOARDS – MAIN Board (Component Side) –

• Semiconductor Location (Component Side)

Ref. No.	Location
D301	F-3
D302	F-3
D303	F-3
D304	F-3
D305	F-3
D306	F-7
D307	H-4
D308	H-4
D311	G-4
D314	G-4
D315	E-2
D316	D-2
D317	D-2
D318	D-2
D320	F-2
D501	G-7
D601	C-5
D602	C-5
IC101	C-8
IC201	E-8
IC202	E-9
IC301	H-4
IC302	F-4
IC304	H-5
IC401	D-6
IC402	F-5
IC403	A-6
IC501	H-7
IC502	H-6
IC503	H-7
IC601	B-5
Q201	F-9
Q301	I-5
Q302	I-4
Q303	E-2
Q306	E-1
Q308	F-2
Q601	E-4
Q602	E-4
Q610	D-4
Q620	D-4



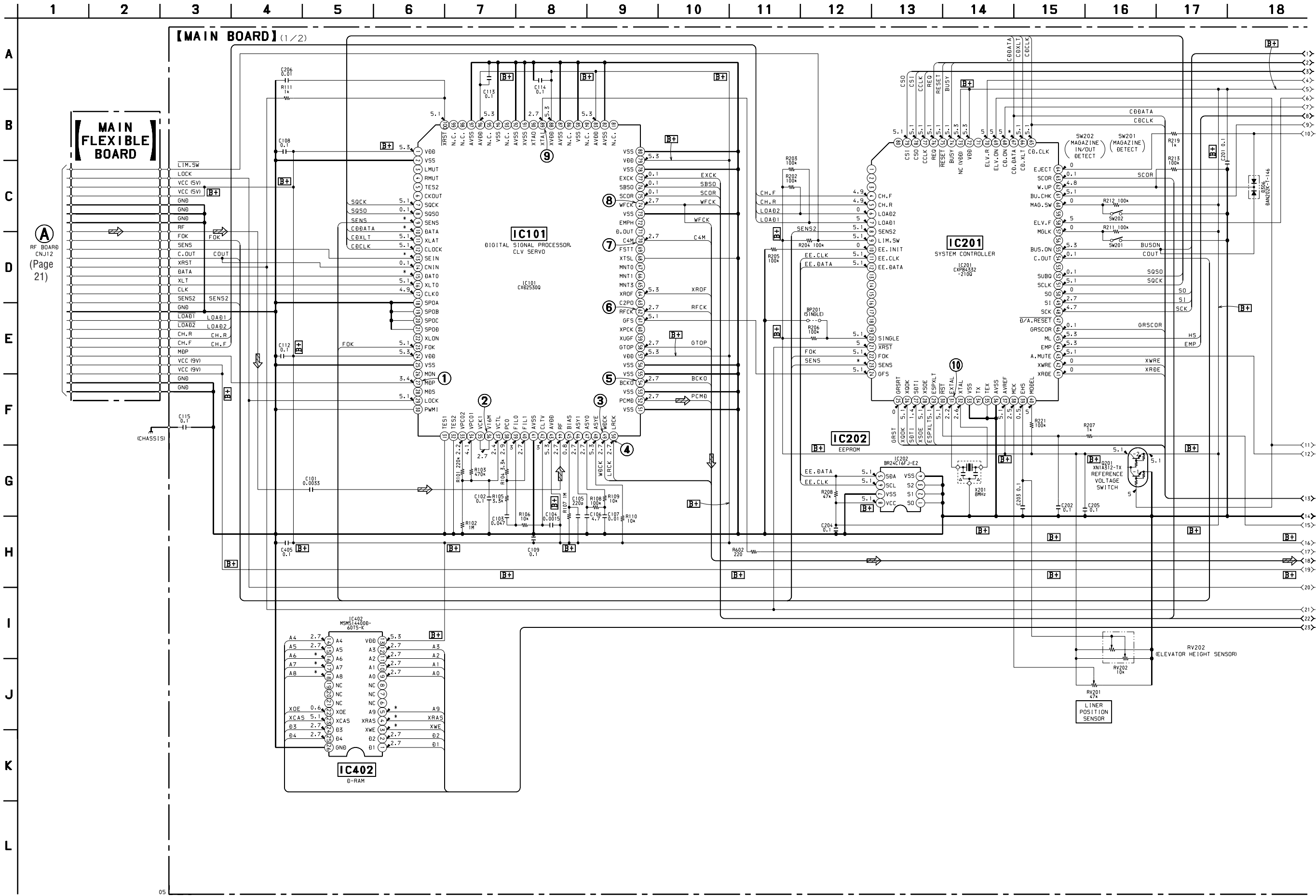
7-8. PRINTED WIRING BOARD – MAIN Board (Conductor Side) –



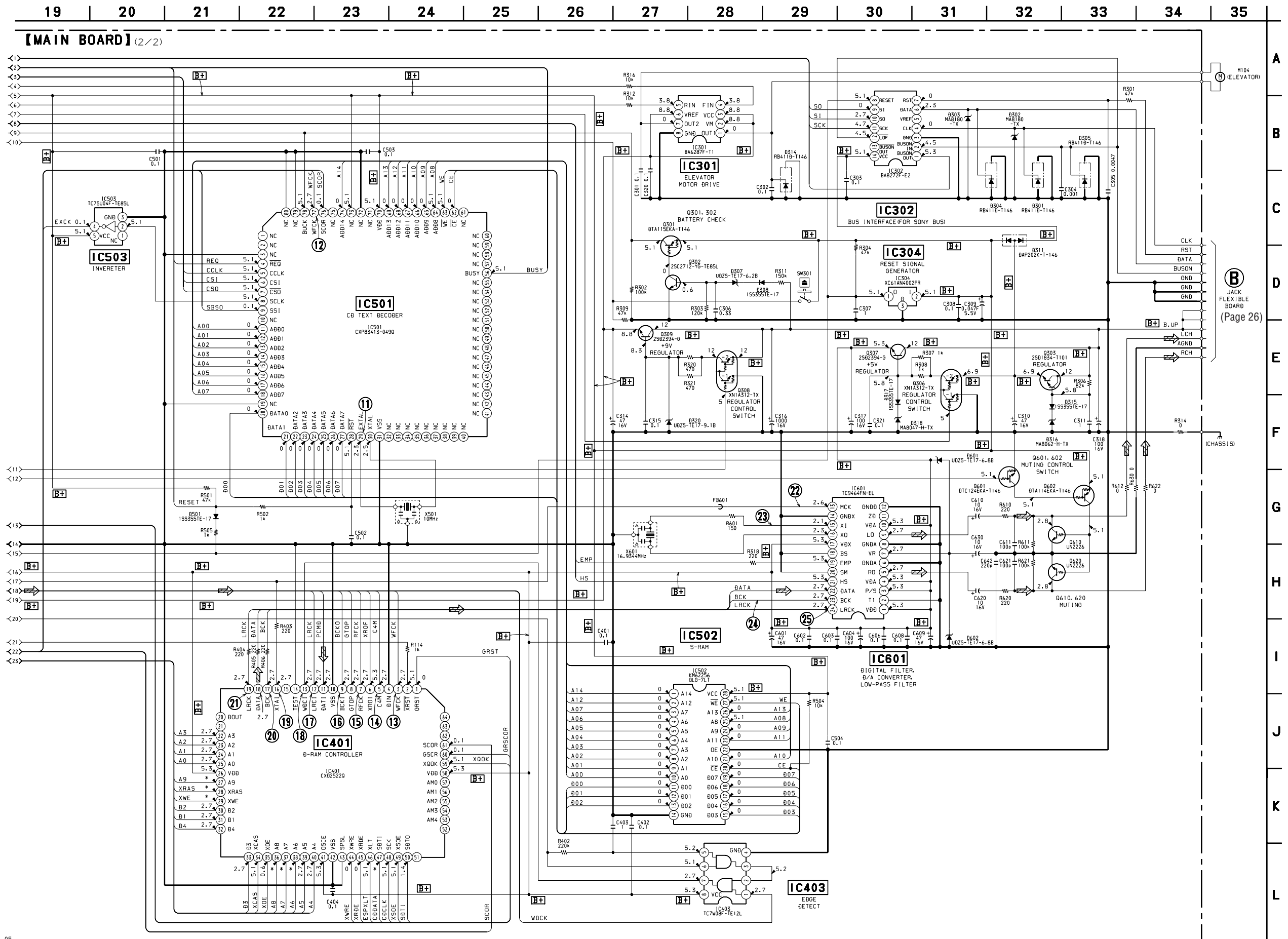
• Semiconductor
Location
(Conductor Side)

Ref. No.	Location
Q307	E-11
Q309	G-11

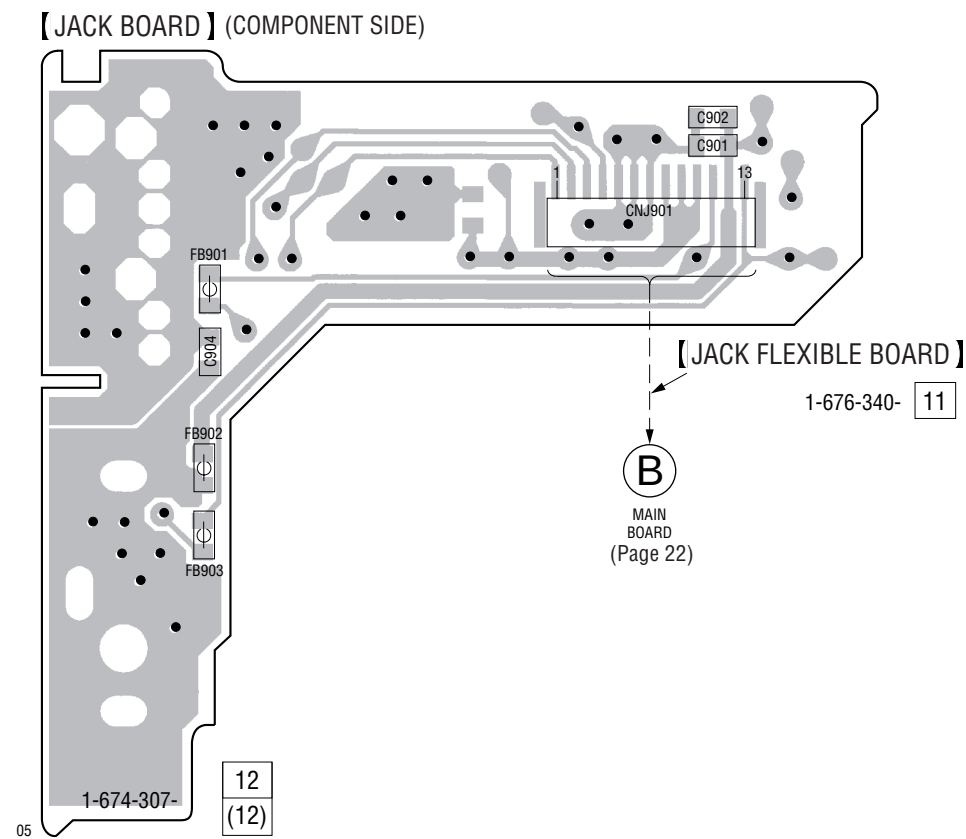
7-9. SCHEMATIC DIAGRAM – MAIN Board (1/2) – • See page 27 for Waveforms. • See page 30 for IC Block Diagrams.



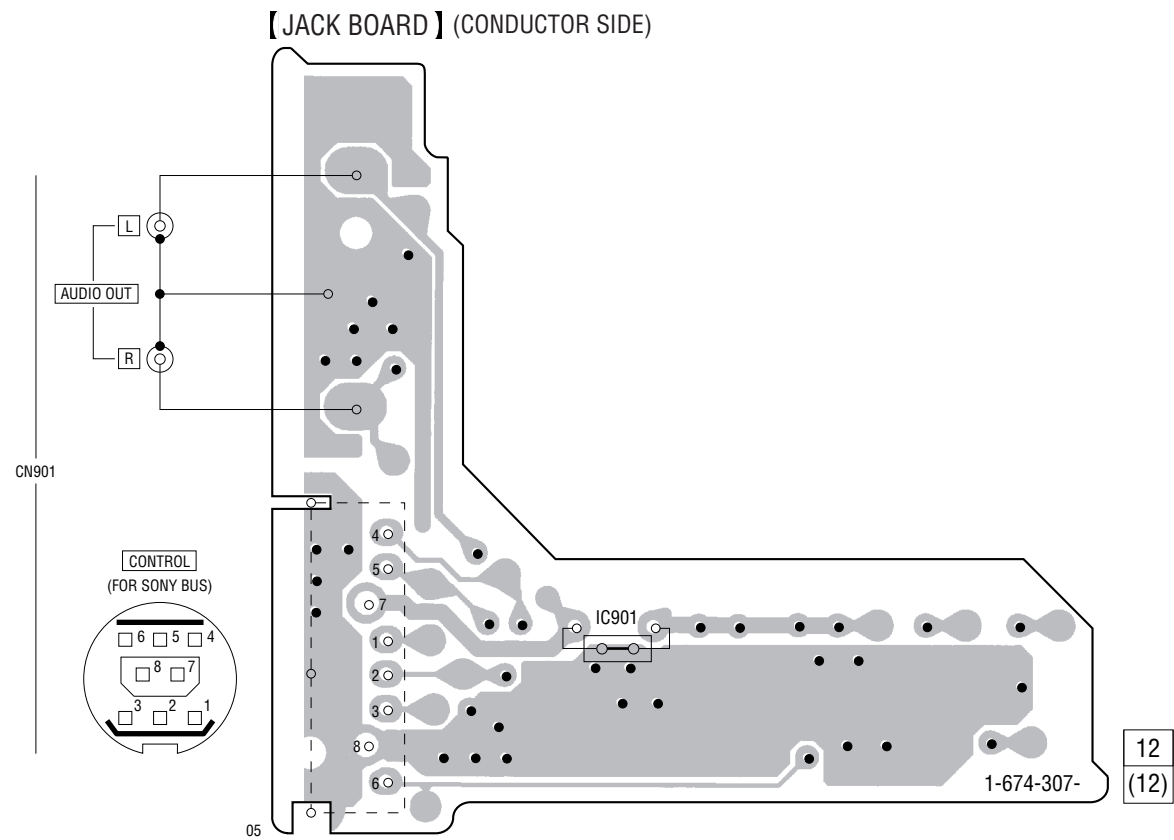
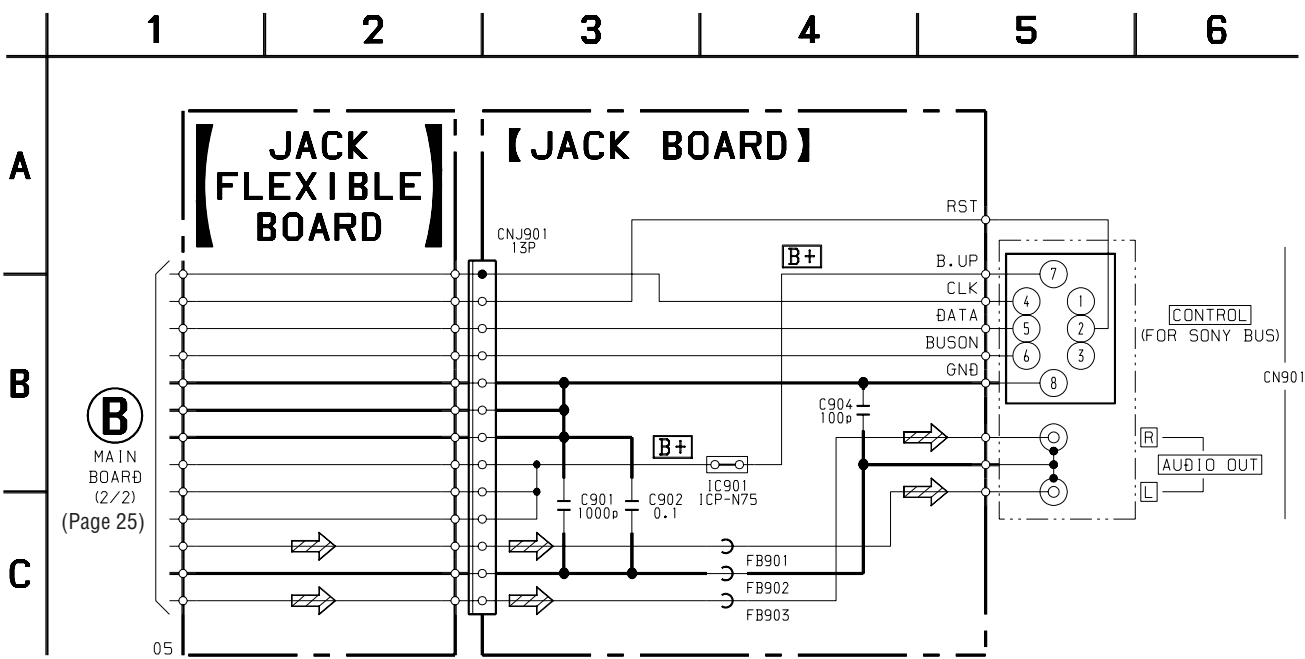
7-10. SCHEMATIC DIAGRAM – MAIN Board (2/2) – • See page 28 for Waveforms. • See page 31 for IC Block Diagrams.



7-11. PRINTED WIRING BOARDS – JACK Board –



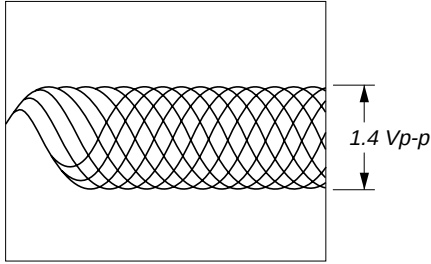
7-12. SCHEMATIC DIAGRAM – JACK Board –



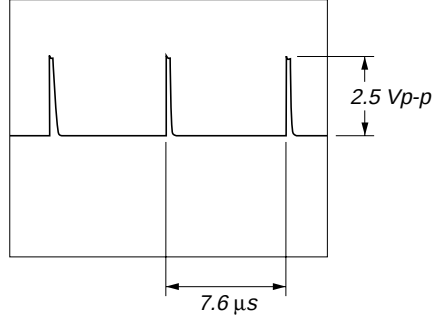
• Waveforms
– RF Board –

– MAIN Board (1/2) –

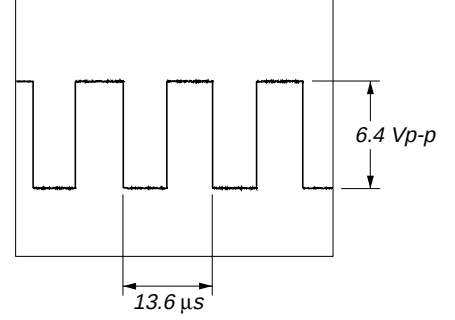
① IC11 ③③ (RF O) (CD PLAY)
500 mV/DIV, 500 ns/DIV



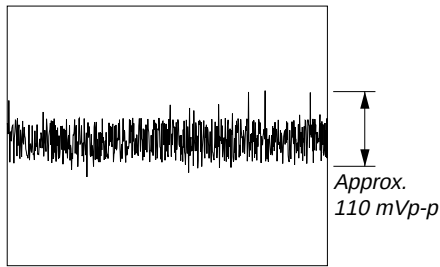
① IC101 ②⑦ (MDP) (CD PLAY)



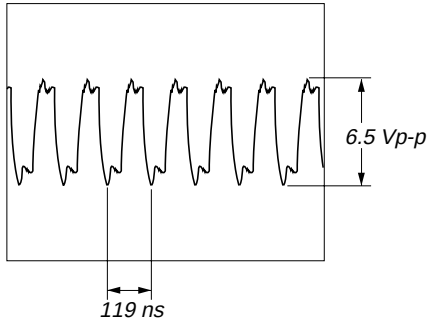
⑥ IC101 ⑥② (RFCK)



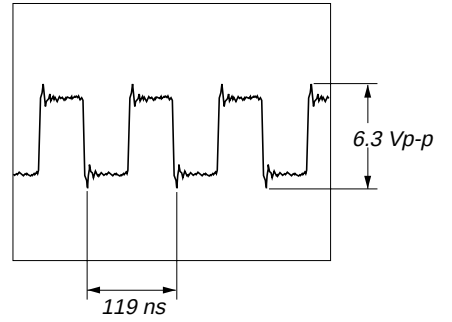
② IC11 ② (FEI) (CD PLAY)
50 mV/DIV, 1 μs/DIV



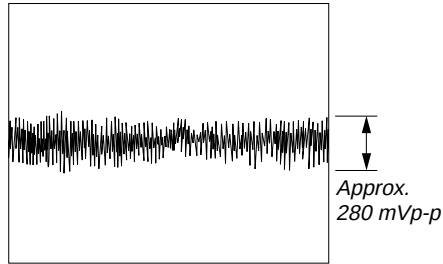
② IC101 ③⑨ (V16M)



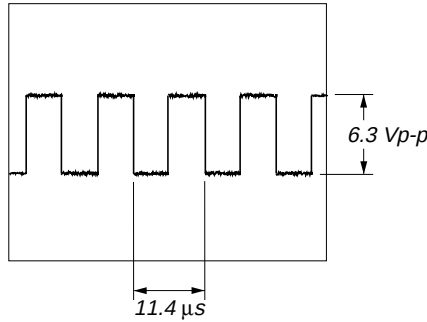
⑦ IC101 ⑦⑦ (C4M)



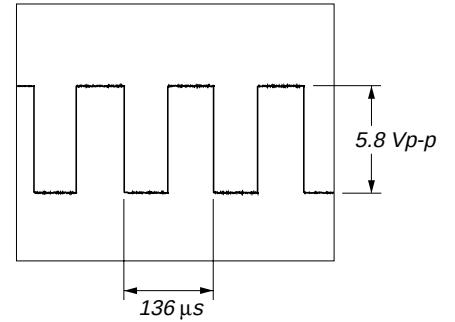
③ IC11 ④⑦ (TEI) (CD PLAY)
200 mV/DIV, 500 μs/DIV



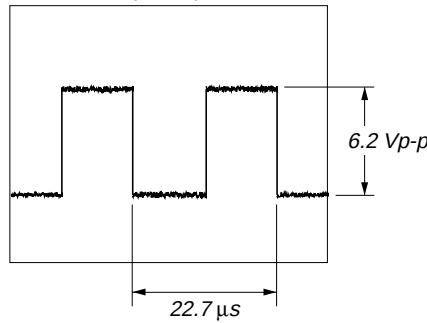
③ IC101 ④⑨ (WDCK)



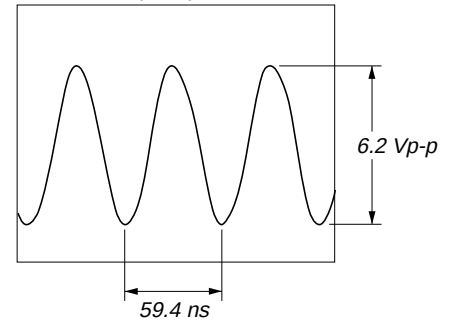
⑧ IC101 ⑦④ (WFCK)



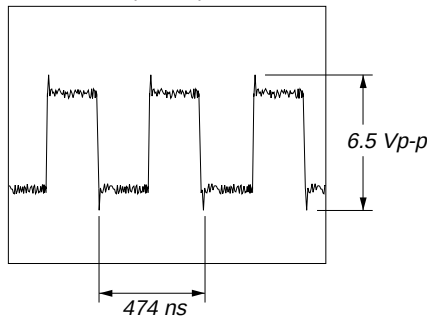
④ IC101 ⑤⑩ (LRCK)



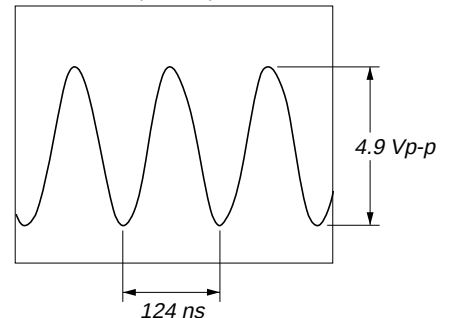
⑨ IC101 ⑧⑨ (XTAI)



⑤ IC101 ⑤④ (BCKO)

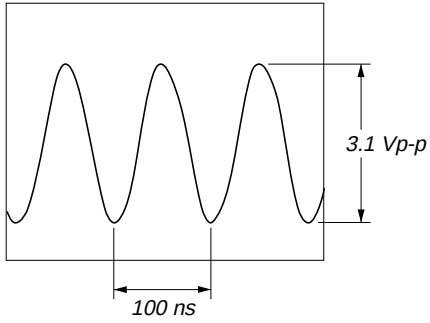


⑩ IC201 ③① (EXTAL)

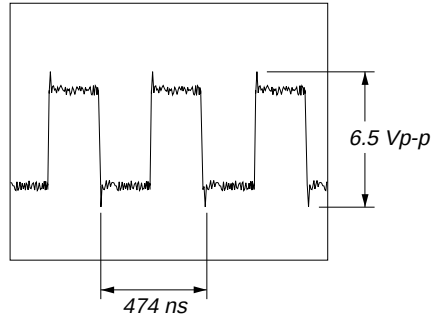


– MAIN Board (2/2) –

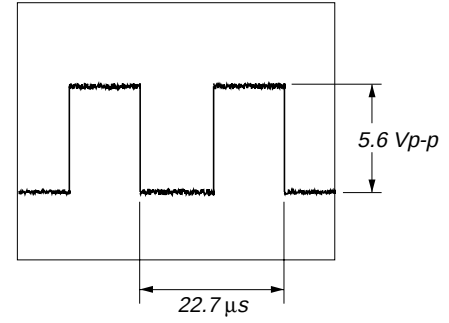
⑪ IC501 ⑳ (EXTAL)



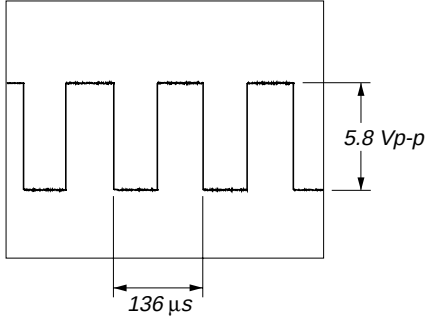
⑫ IC401 ⑨ (BCKI)



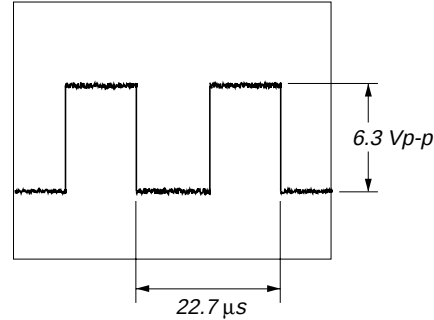
⑬ IC401 ⑱ (LRCK)



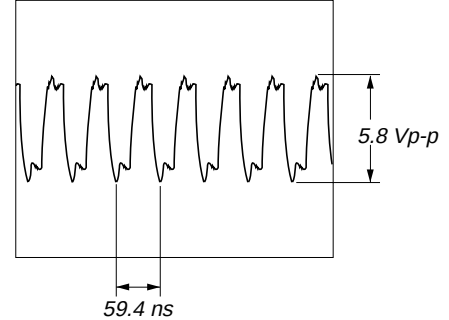
⑭ IC501 ㉑ (WRCK)



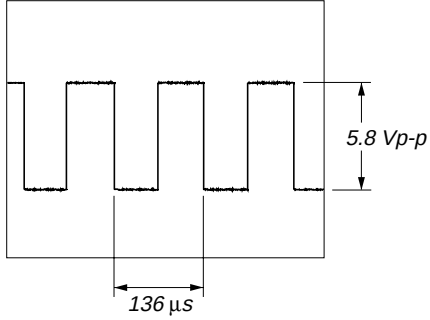
⑮ IC401 ⑫ (LRCl)



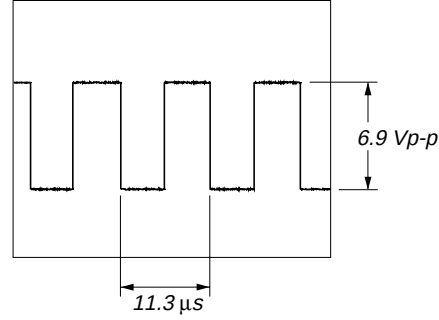
⑯ IC601 ⑬ (MCK)



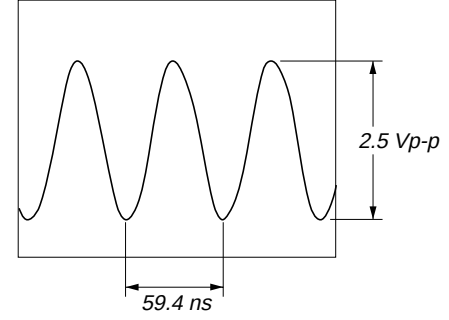
⑰ IC401 ③ (WFCK)



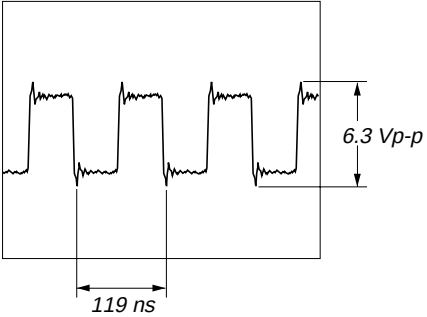
⑰ IC401 ⑬ (WDCI)



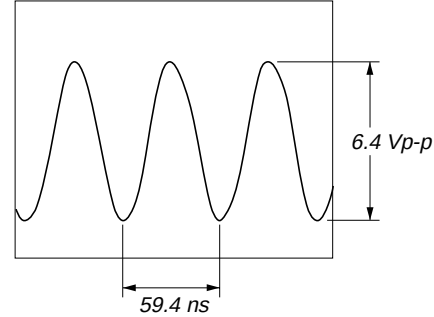
⑰ IC601 ⑮ (XI)



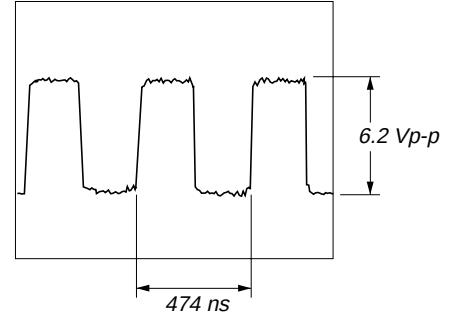
⑰ IC401 ⑤ (C4M)



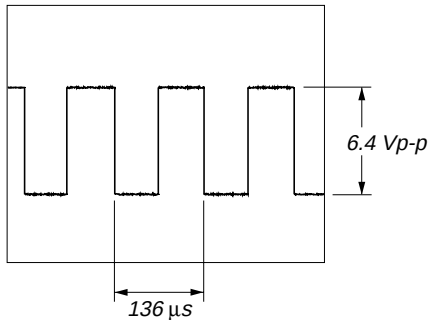
⑰ IC401 ⑮ (XTAI)



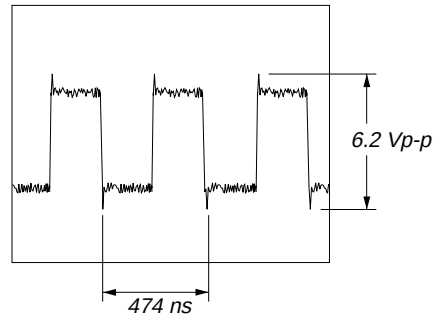
⑰ IC601 ㉓ (BCK)



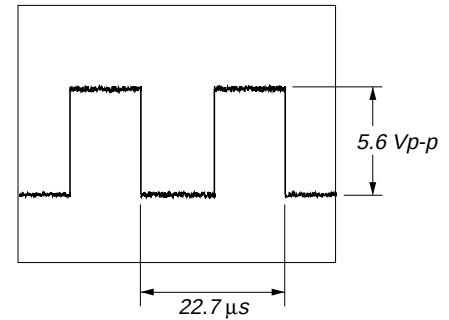
⑰ IC401 ⑦ (RFCK)



⑰ IC401 ⑰ (BCK)

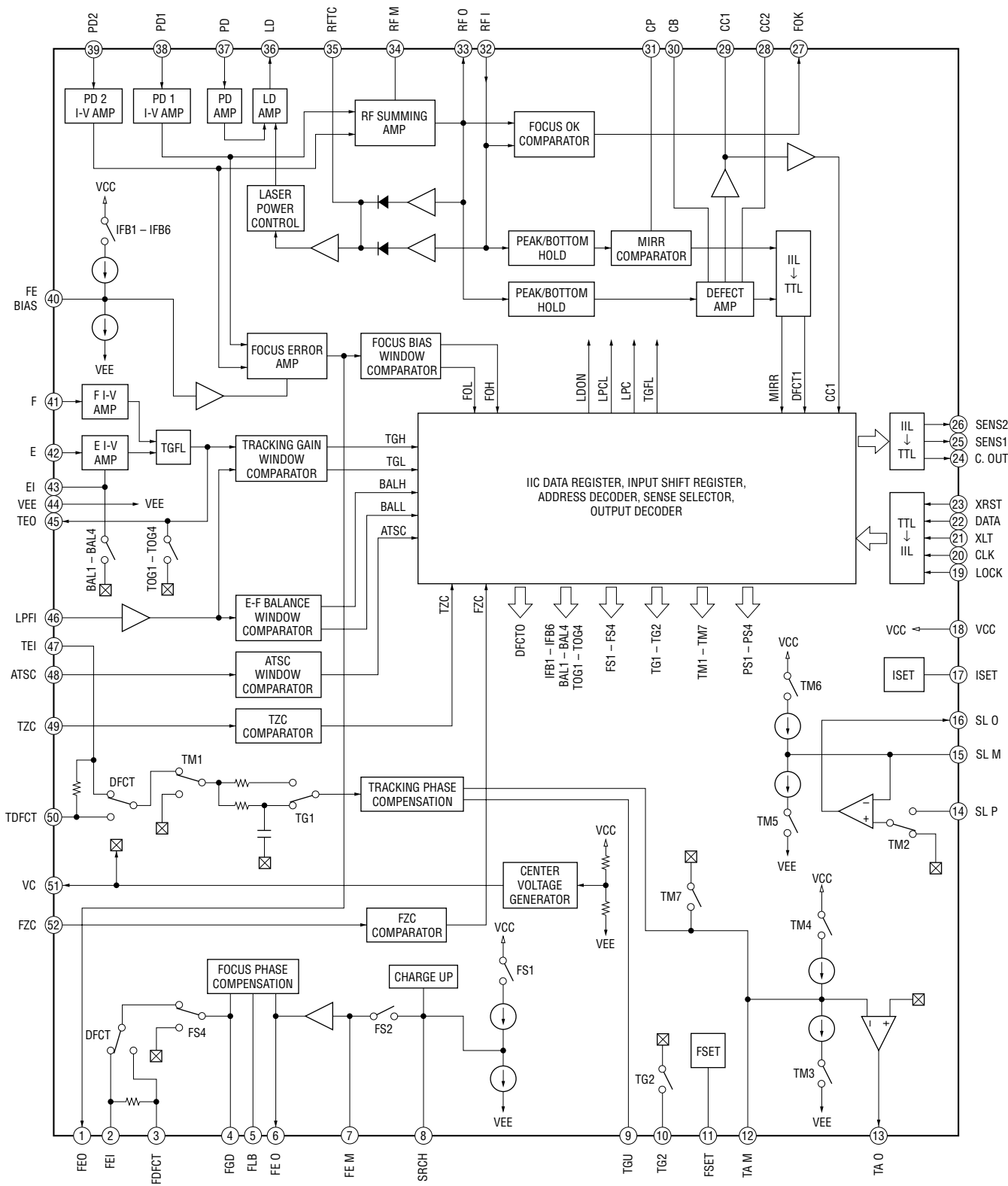


⑰ IC601 ㉔ (LRCK)

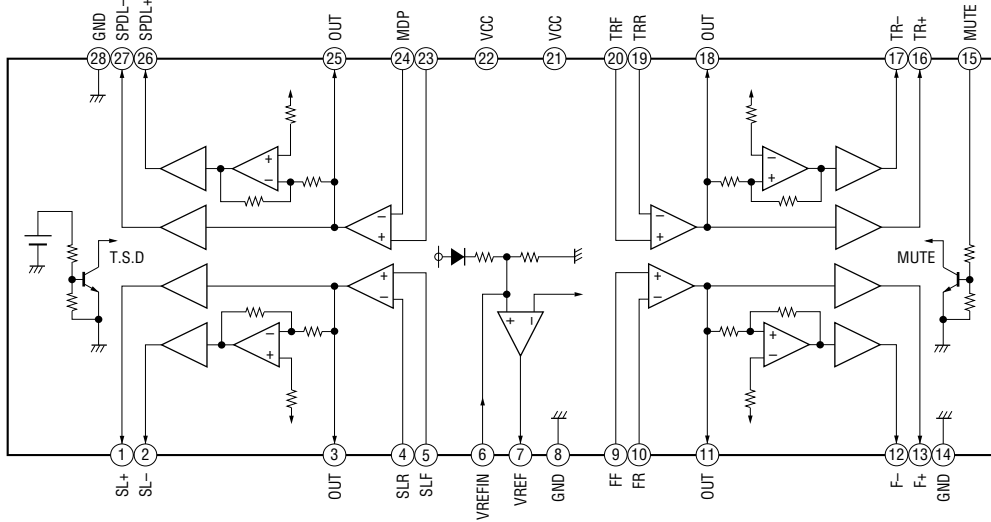


- IC Block Diagrams
- RF Board –

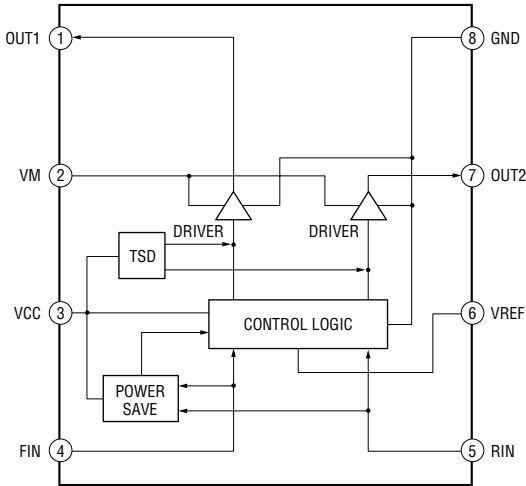
IC11 CXA1992BR



IC51 BA6297AFP

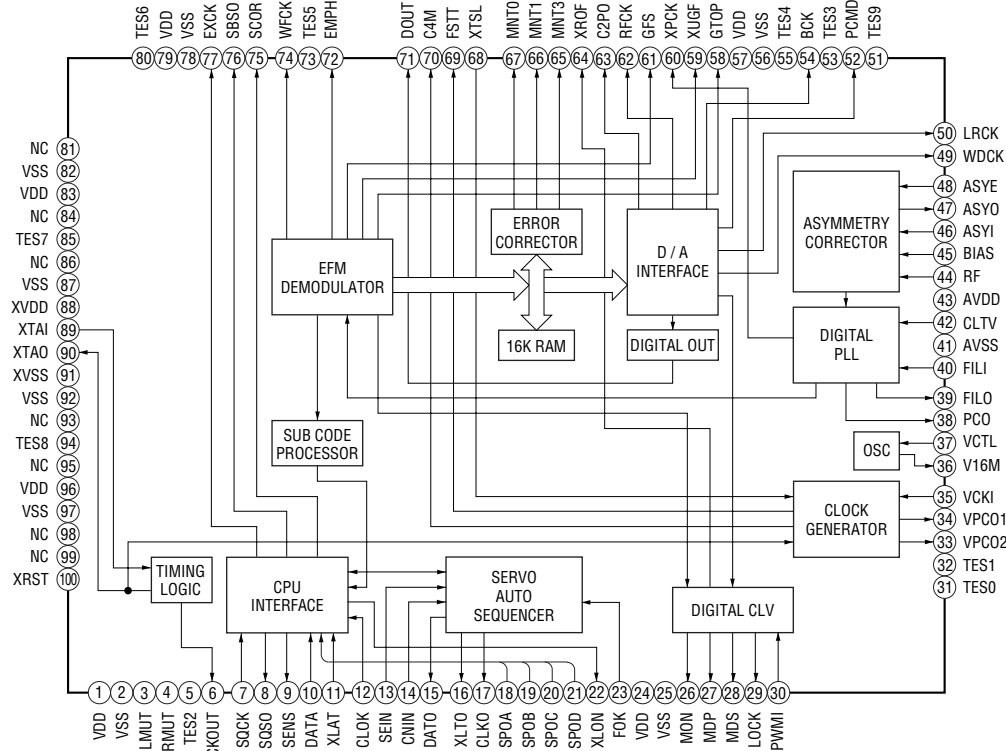


IC52 BA6287F



– MAIN Board –

IC101 CXD2530Q



The block diagram illustrates the internal architecture of the 24C02 serial EEPROM. Key components and their interconnections include:

- START STOP LOGIC:** Receives external control signals and provides inputs to the SERIAL CONTROL LOGIC.
- SERIAL CONTROL LOGIC:** The central control unit that manages data flow. It receives an **EN** (enable) signal and controls the H.V. PUMP/TIMING, DATA RECOVERY, and SERIAL MUX.
- H.V. PUMP/TIMING:** Provides high-voltage pulses for data recovery, controlled by the SERIAL CONTROL LOGIC.
- DATA RECOVERY:** Receives high-voltage pulses and provides input to the SERIAL MUX.
- DATA WORD ADDR/COUNTER:** Receives **LOAD** and **INC** signals from the SERIAL CONTROL LOGIC and provides a **R/W** (Read/Write) signal to the DEVICE ADDRESS COMPARATOR.
- DEVICE ADDRESS COMPARATOR:** Receives address inputs (A0, A1, A2) and provides a **LOAD** signal to the DATA WORD ADDR/COUNTER.
- E²PROM:** The main memory array, controlled by the SERIAL CONTROL LOGIC and the DATA WORD ADDR/COUNTER.
- SERIAL MUX:** Receives data from the DATA RECOVERY and the E²PROM, and provides input to the D_{OUT}/ACK LOGIC.
- D_{OUT}/ACK LOGIC:** Manages data output (D_{OUT}) and acknowledgment (ACK) signals, receiving inputs from the SERIAL MUX and the DATA WORD ADDR/COUNTER.
- DECODERS:** X DEC and Y DEC are used to address the E²PROM array.
- External Connections:** The diagram shows connections for VCC (8), TST (7), SDL (6), SDA (5), and GND (4). Address lines A0, A1, and A2 are also shown.

The pin diagram shows an 8-pin package with the following connections:

- Pin 1:** OUT1
- Pin 2:** VM
- Pin 3:** VCC
- Pin 4:** FIN
- Pin 5:** RIN
- Pin 6:** VREF
- Pin 7:** OUT2
- Pin 8:** GND

The internal block diagram includes:

- CONTROL LOGIC:** Receives inputs from VCC (Pin 3), VREF (Pin 6), and RIN (Pin 5). It outputs to OUT1 (Pin 1), OUT2 (Pin 7), and the DRIVER blocks.
- DRIVER:** Two driver blocks that receive signals from the CONTROL LOGIC and the VM (Pin 2) input. They output to OUT1 (Pin 1) and OUT2 (Pin 7).
- TSD:** Thermal Sense Diode block that receives input from VCC (Pin 3) and outputs to the DRIVER blocks.
- POWER SAVE:** Receives inputs from VCC (Pin 3) and RIN (Pin 5), and outputs to the CONTROL LOGIC.

The diagram illustrates the internal architecture of the TMS320C49 DSP, showing the interconnections between various functional blocks and the external pins. The pins are numbered 1 through 64, with some pins having multiple functions or connections.

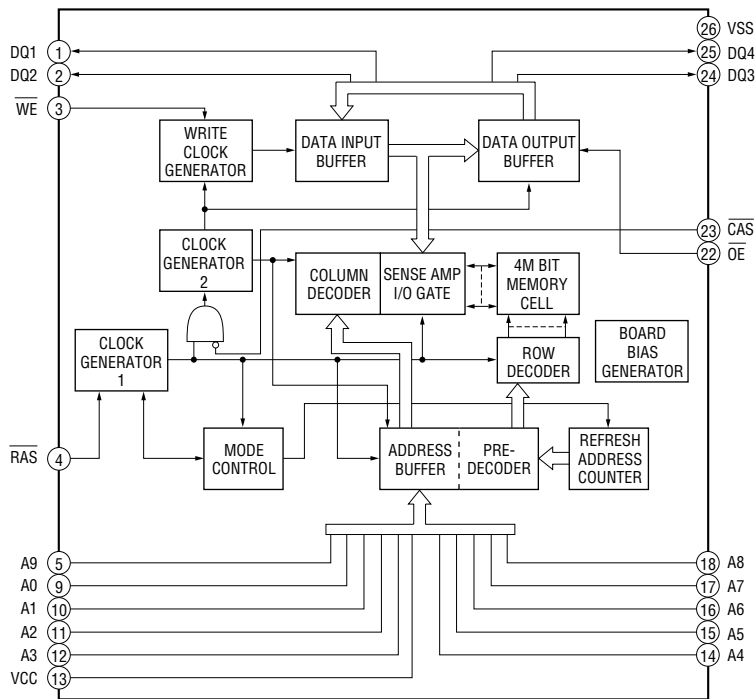
Internal Blocks:

- CPU I/F:** Connected to pins 51 (XEMP), 50 (SDTO), 49 (XOE), 48 (SCK), 47 (SDTI), 46 (XLT), 45 (XRDE), 44 (XWRE), and 43 (SPSL).
- ADDRESS MONITOR:** Connected to the CPU I/F and the WRITE BASE COUNTER.
- WRITE BASE COUNTER:** Connected to the ADDRESS MONITOR and the VWA pin (42).
- READ BASE COUNTER:** Connected to the CPU I/F and the VWA pin (42).
- DRAM I/F:** Connected to pins 40 (A4), 39 (A5), 38 (A6), 37 (A7), 36 (A8), 35 (XOE), 34 (XCAS), and 33 (D2).
- SELECTOR:** Connected to the DRAM I/F and the TIMING GEN.
- TIMING GEN:** Connected to the SELECTOR and the DAC I/F.
- DAC I/F:** Connected to pins 16 (BCK), 17 (DATA), and 18 (LRCK).
- DIGITAL OUT:** Connected to pin 20 (DOUT).
- DSP I/F:** Connected to pins 9 (BCKI), 10 (VSS), 11 (DATI), 12 (LRCI), 13 (WDCI), and 14 (TEST).
- DATA LINKING CONTROL:** Connected to pins 1 (GRST), 2 (XRST), 3 (WFCK), 4 (DIN), 5 (C4M), 6 (XRQI), 7 (RCK), 8 (GTOP), and 15 (XTAO).

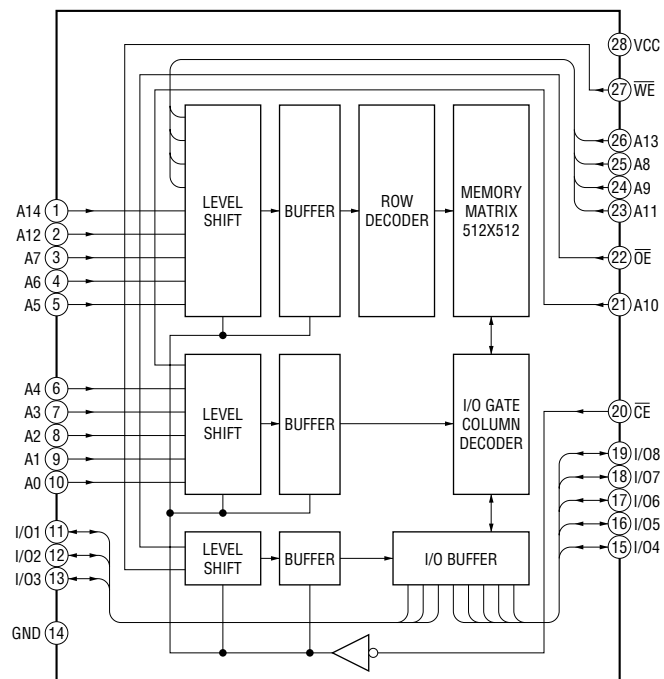
Pin Connections:

- Pin 52:** XWIH
- Pin 53:** AM4
- Pin 54:** AM3
- Pin 55:** AM2
- Pin 56:** AM1
- Pin 57:** AM0
- Pin 58:** VDD
- Pin 59:** XQOK
- Pin 60:** GSCR
- Pin 61:** SCOR
- Pin 62:** NC
- Pin 63:** NC
- Pin 64:** NC

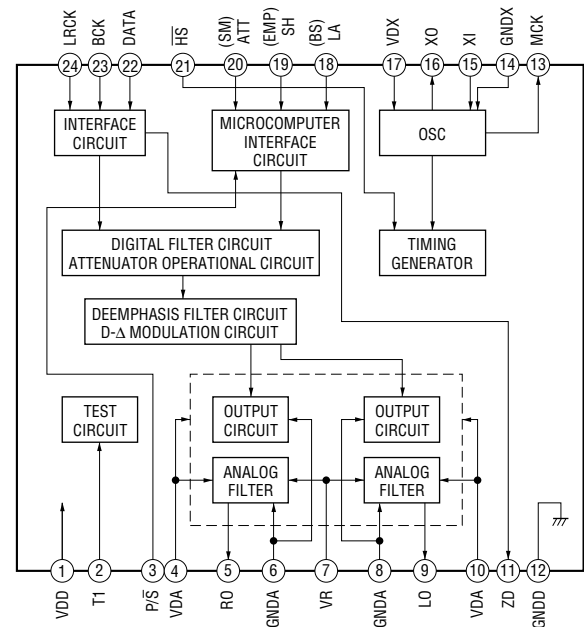
IC402 MSM514400D-60TS-K



IC502 KM62256DLG-7LT



IC601 TC9464FN-EL



7-13. IC PIN FUNCTION DESCRIPTION

• MAIN BOARD IC201 CXP84332-210Q (SYSTEM CONTROLLER)

Pin No.	Pin Name	I/O	Description
1 to 3	—	O	Not used (open)
4	CH.F	O	Motor drive signal (load chucking direction) output to the chucking motor drive (IC52) “L” active *1
5	CH.R	O	Motor drive signal (save direction) output to the chucking motor drive (IC52) “L” active *1
6	LOAD2	I	Chucking end detect switch (SW11) input terminal “L”: When completion of the disc chucking operation
7	LOAD1	I	Save end detect switch (SW12) input terminal “L”: When completion of the disc chucking operation
8	SENS2	I	Internal status signal (sense signal) input from the CXA1992BR (IC11)
9	LIM.SW	I	Sled limit in detect switch (SW1) input terminal “L”: When the optical pick-up is inner position
10	EE.INIT	I	Initialize signal input for the EEPROM (IC202) “H”: format Fixed at “L” in this set
11	EE.CLK	O	Serial data transfer clock signal output to the EEPROM (IC202)
12	EE.DATA	I/O	Two-way data bus with the EEPROM (IC202)
13 to 19	—	O	Not used (open)
20	SINGLE	I	Setting terminal for the single disc/multiple discs mode “L”: single mode, “H”: multiple discs mode (fixed at “H”)
21	$\overline{\text{XRST}}$	O	System reset signal output to the CXA1992BR (IC11), CXD2530Q (IC101) and CXD2522Q (IC401) “L”: reset
22	FOK	I	Focus OK signal input from the CXA1992BR (IC11) “L”: NG, “H”: OK
23	SENS	I	Internal status signal (sense signal) input from the CXD2530Q (IC101)
24	GFS	I	Guard frame sync signal input from the CXD2530Q (IC101) “L”: NG, “H”: OK
25	GRSRT	O	Reset signal output to the CXD2522Q (IC401) “L”: reset
26	XQOK	O	Subcode Q OK pulse signal output to the CXD2522Q (IC401) “L” active
27	SDTI	I	ESP status signal input from the CXD2522Q (IC401)
28	XSOE	O	ESP status read enable signal output to the CXD2522Q (IC401) “L” active
29	ESPXLT	O	ESP latch pulse signal output to the CXD2522Q (IC401) “L” active
30	$\overline{\text{RST}}$	I	System reset signal input from the SONY bus interface (IC302) and reset signal generator (IC304) “L”: reset For several hundreds msec. after the power supply rises, “L” is input, then it changes to “H”
31	EXTAL	I	Main system clock input terminal (8 MHz)
32	XTAL	O	Main system clock output terminal (8 MHz)
33	VSS	—	Ground terminal
34	TX	O	Sub system clock output terminal Not used (open)
35	TEX	I	Sub system clock input terminal Not used (fixed at “L”)
36	AVSS	—	Ground terminal (for A/D converter)
37	AVREF	I	Reference voltage (+5V) input terminal (for A/D converter)
38	MCK	I	Input of signal for the fine adjustment (linear position sensor adjustment; RV201) of elevator position (A/D input)
39	EHS	I	Elevator height position detect input from the RV202 (elevator height sensor) (A/D input)
40	MODEL	I	Setting terminal for the destination (fixed at “H” in this set)
41	XRDE	O	D-RAM read enable signal output to the CXD2522Q (IC401) “L” active
42	XWRE	O	D-RAM write enable signal output to the CXD2522Q (IC401) “L” active
43	A.MUTE	O	Audio line muting on/off control signal output terminal “H”: muting on
44	EMP	O	Emphasis mode output to the D/A converter (IC601) “H”: emphasis on
45	ML	O	Fast speed dubbing control signal output to the D/A converter (IC601) “L”: fast speed
46	GRSCOR	I	Subcode sync (S0+S1) detection signal input from the CXD2522Q (IC401)

Pin No.	Pin Name	I/O	Description
47	<u>D/A.RESET</u>	O	Reset signal output terminal “L”: reset Not used (open)
48	SCK	I	Serial data transfer clock signal input from the SONY bus interface (IC302)
49	SI	I	Serial data input from the SONY bus interface (IC302)
50	SO	O	Serial data output to the SONY bus interface (IC302)
51	SCLK	O	Subcode Q data reading clock signal output to the CXD2530Q (IC101)
52	SUBQ	I	Subcode Q data input from the CXD2530Q (IC101)
53	—	O	Not used (open)
54	C.OUT	I	Track number count signal input from the CXA1992BR (IC11)
55	BUS.ON	I	Bus on/off control signal input from the SONY bus interface (IC302) “H”: bus on
56	—	I	Not used (open)
57	MGLK	I	Magazine eject operation completion detect switch (SW201) input “L”: magazine detected
58	ELV.F	O	Motor drive signal (elevator up direction) output to the elevator motor drive (IC301) “L” active *2
59	—	O	Not used (open)
60	MAG.SW	I	Magazine in/out detect switch (SW202) input “L”=normally “H”=magazine in/out operation
61	BU.CHK	I	Battery detection signal input terminal “H”: battery on
62	W.UP	I	Bus on or eject switch (SW301) input terminal “H”: bus on or eject switch pushing
63	SCOR	I	Subcode sync (S0+S1) detection signal input from the CXD2530Q (IC101)
64	EJECT	I	Eject switch (SW301) input terminal “H” active
65	CD.CLK	O	Serial data transfer clock signal output to the CXD2530Q (IC101) and CXD2522Q (IC401)
66	CD.XLT	O	Serial data latch pulse signal output to the CXD2530Q (IC101)
67	CD.DATA	O	Serial data output to the CXD2530Q (IC101) and CXD2522Q (IC401)
68	CD.ON	O	D/A converter and servo section power supply on/off control signal output “H”: power on
69	ELV.ON	O	Mechanism deck section power supply on/off control signal output “H”: power on
70	ELV.R	O	Motor drive signal (elevator down direction) output to the elevator motor drive (IC301) “L” active *2
71	—	O	Not used (open)
72	VDD	—	Power supply terminal (+5V)
73	NC (VDD)	—	Connected to the power supply (+5V)
74	<u>BUSY</u>	I	Busy monitor input from the CD text decoder (IC501) “L”: busy status
75	<u>RESET</u>	O	Reset signal output to the CD text decoder (IC501) “L”: reset
76	REQ	I	Data request signal input from the CD text decoder (IC501) “L” active
77	CCCLK	O	Command clock signal output to the CD text decoder (IC501)
78	CSO	O	Command data output to the CD text decoder (IC501)
79	CSI	I	Command data input from the CD text decoder (IC501)
80	—	I	Not used (open)

*1 chucking motor (M103) control

Terminal \ Mode	STOP	LOAD CHUCKING	SAVE	BRAKE
CH.F (pin ④)	“H”	“L”	“H”	“L”
CH.R (pin ⑤)	“H”	“H”	“L”	“L”

*2 elevator motor (M104) control

Terminal \ Mode	STOP	ELEVATOR UP	ELEVATOR DOWN	BRAKE
ELV.F (pin ⑤⑨)	“H”	“L”	“H”	“L”
ELV.R (pin ⑦⑩)	“H”	“H”	“L”	“L”

• MAIN BOARD IC501 CXP83413-049Q (CD TEXT DECODER)

Pin No.	Pin Name	I/O	Description
1, 2	NC	O	Not used (open)
3	NC	I	Not used (fixed at “L”)
4	$\overline{\text{REQ}}$	O	Request signal output to the system controller (IC201) “L” active
5	CCLK	I	Serial data transfer clock signal input from the system controller (IC201)
6	CSI	I	Serial data input from the system controller (IC201)
7	$\overline{\text{CSO}}$	O	Serial data output to the system controller (IC201)
8	SCLK	O	Clock signal output for subcode data reading to the CXD2530Q (IC101)
9	SSI	I	Subcode data input from the CXD2530Q (IC101)
10	NC	O	Not used (open)
11 to 18	ADD0 to ADD7	O	Address signal output to the S-RAM (IC502)
19	NC	I	Not used (fixed at “L”)
20 to 27	DATA0 to DATA7	I/O	Two-way data bus with the S-RAM (IC502)
28	$\overline{\text{RST}}$	I	System reset signal input from the system controller (IC201), SONY bus interface (IC302) and reset signal generator (IC304) “L”: reset For several hundreds msec. after the power supply rises, “L” is input, then it changes to “H”
29	EXTAL	I	System clock input terminal (10 MHz)
30	XTAL	O	System clock output terminal (10 MHz)
31	VSS	—	Ground terminal
32 to 55	NC	O	Not used (open)
56	BUSY	O	Busy signal output to the system controller (IC201) “L”: busy status
57 to 61	NC	O	Not used (open)
62	$\overline{\text{CE}}$	O	Chip enable signal output to the S-RAM (IC502) “L” active
63	$\overline{\text{WE}}$	O	Data write enable signal output to the S-RAM (IC502) “L” active
64 to 69	ADD8 to ADD13	O	Address signal output to the S-RAM (IC502)
70	VDD	—	Power supply terminal (+5V)
71	NC	O	Not used (open)
72	NC	I	Not used (fixed at “L”)
73	NC	I	Not used (fixed at “H”)
74	ADD14	O	Address signal output to the S-RAM (IC502)
75	NC	O	Not used (open)
76	SCOR	I	Subcode sync (S0+S1) detection signal input from the CXD2530Q (IC101)
77	WFCK	I	Write frame clock (7.35 kHz) signal input from the CXD2530Q (IC101)
78	BUCK	I	Backup power supply detection signal input terminal (used also to reset standby)
79, 80	NC	I	Not used (fixed at “L”)

SECTION 8 EXPLODED VIEWS

NOTE:

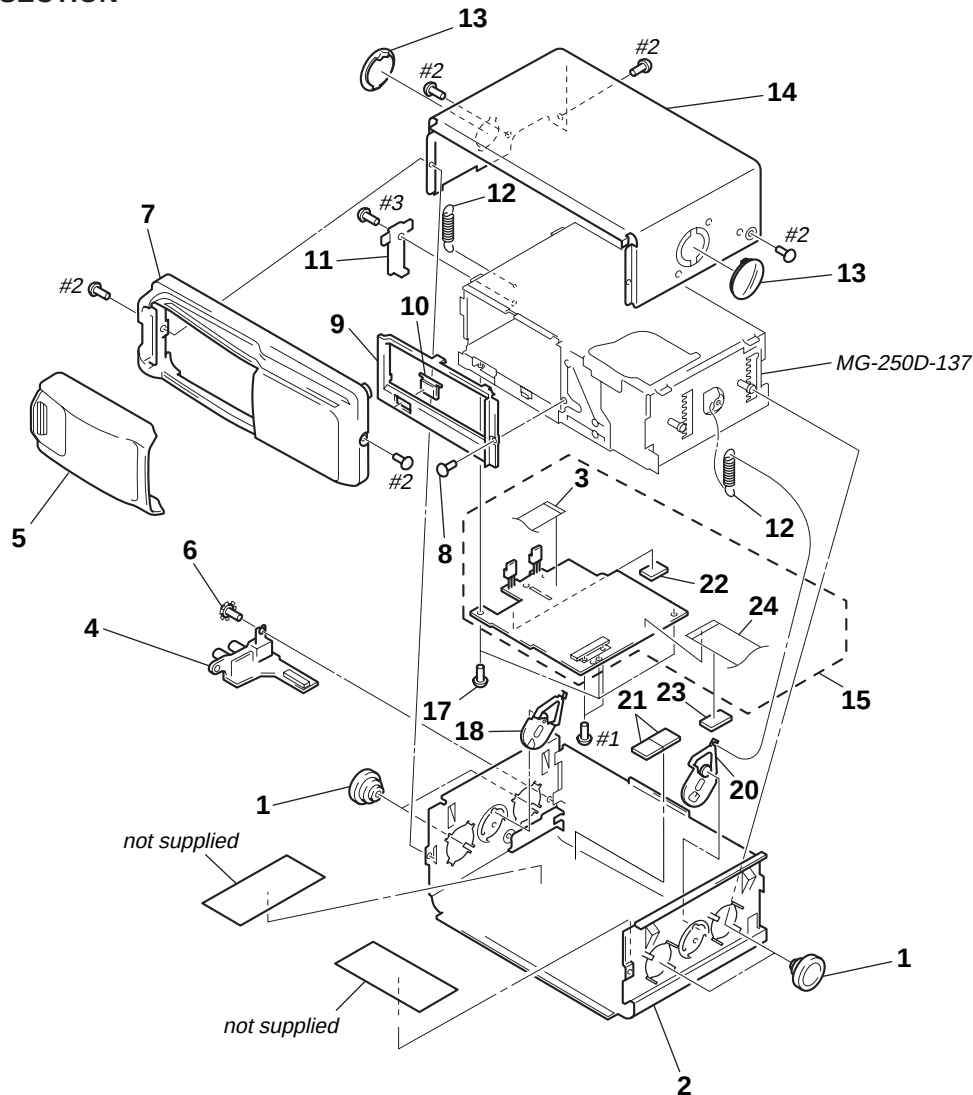
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
Example:
KNOB, BALANCE (WHITE) . . . (RED)
 ↑ ↑
 Parts Color Cabinet's Color

- Items marked “*” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of the electrical parts list.

The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

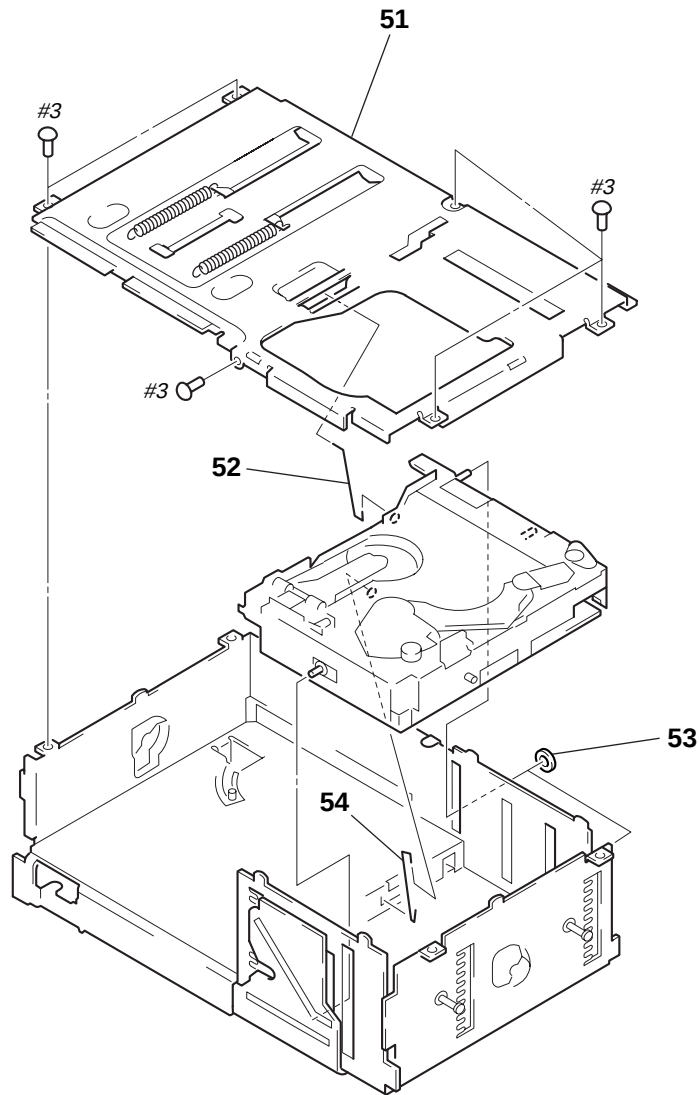
Les composants identifiés par une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

(1) COVER SECTION



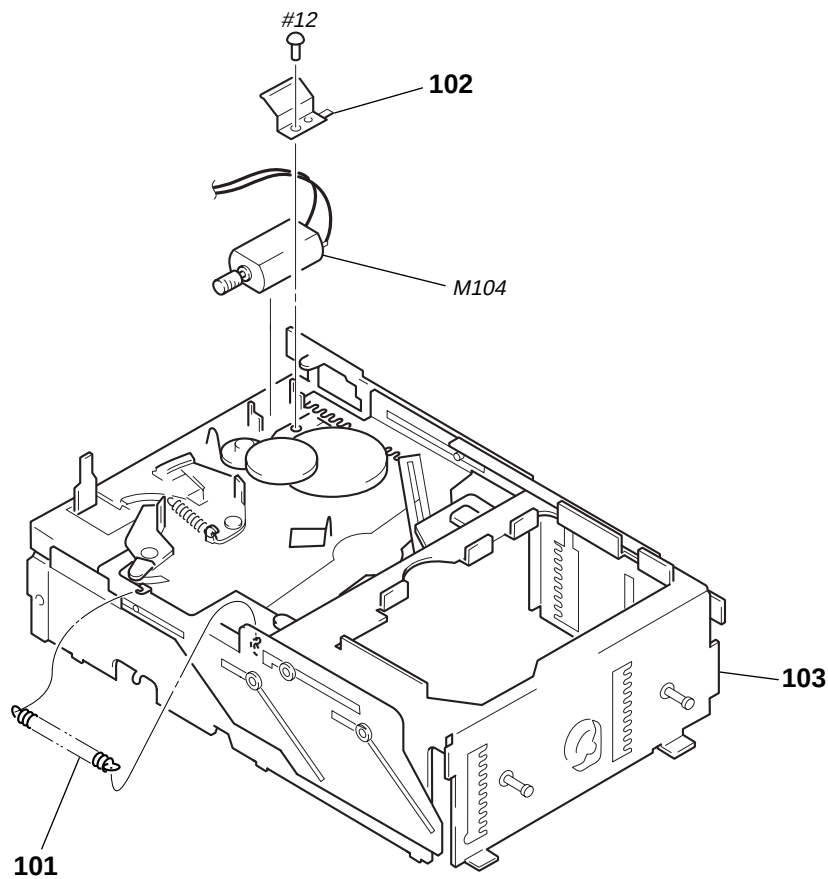
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	3-010-104-01	DAMPER (250)		12	3-038-166-01	SPRING (FL), TENSION COIL	
* 2	3-036-546-71	COVER (LOWER T)		13	3-022-010-31	LEVER (FLT)	
3	1-664-628-11	JACK FLEXIBLE BOARD		* 14	3-022-008-71	COVER (UPPER T)	
* 4	1-674-307-12	JACK BOARD		* 15	A-3326-236-A	MAIN BOARD, COMPLETE	
5	X-3378-115-1	DOOR (T) ASSY		17	3-935-636-11	SCREW (FP)	
6	3-376-464-11	SCREW (+PTT 2.6X6), GROUND POINT		18	X-3375-357-1	ARM (FLT) ASSY	
7	3-039-239-31	PANEL (T), FRONT		20	X-3375-360-1	ARM (FRT) ASSY	
8	3-012-388-01	SCREW (M2X3)		* 21	3-024-065-01	CUSHION (EJECT)	
9	3-022-006-02	ESCUTCHEON (T)		22	3-028-802-01	SPACER (MOUNT 30)	
10	3-022-007-02	BUTTON (EJT) (Δ)		23	3-024-067-01	CUSHION (T), BATTERY	
* 11	3-022-012-01	HEAT SINK (T)		24	1-676-339-11	MAIN FLEXIBLE BOARD	

(2) MECHANISM DECK SECTION-1
(MG-250D-137)



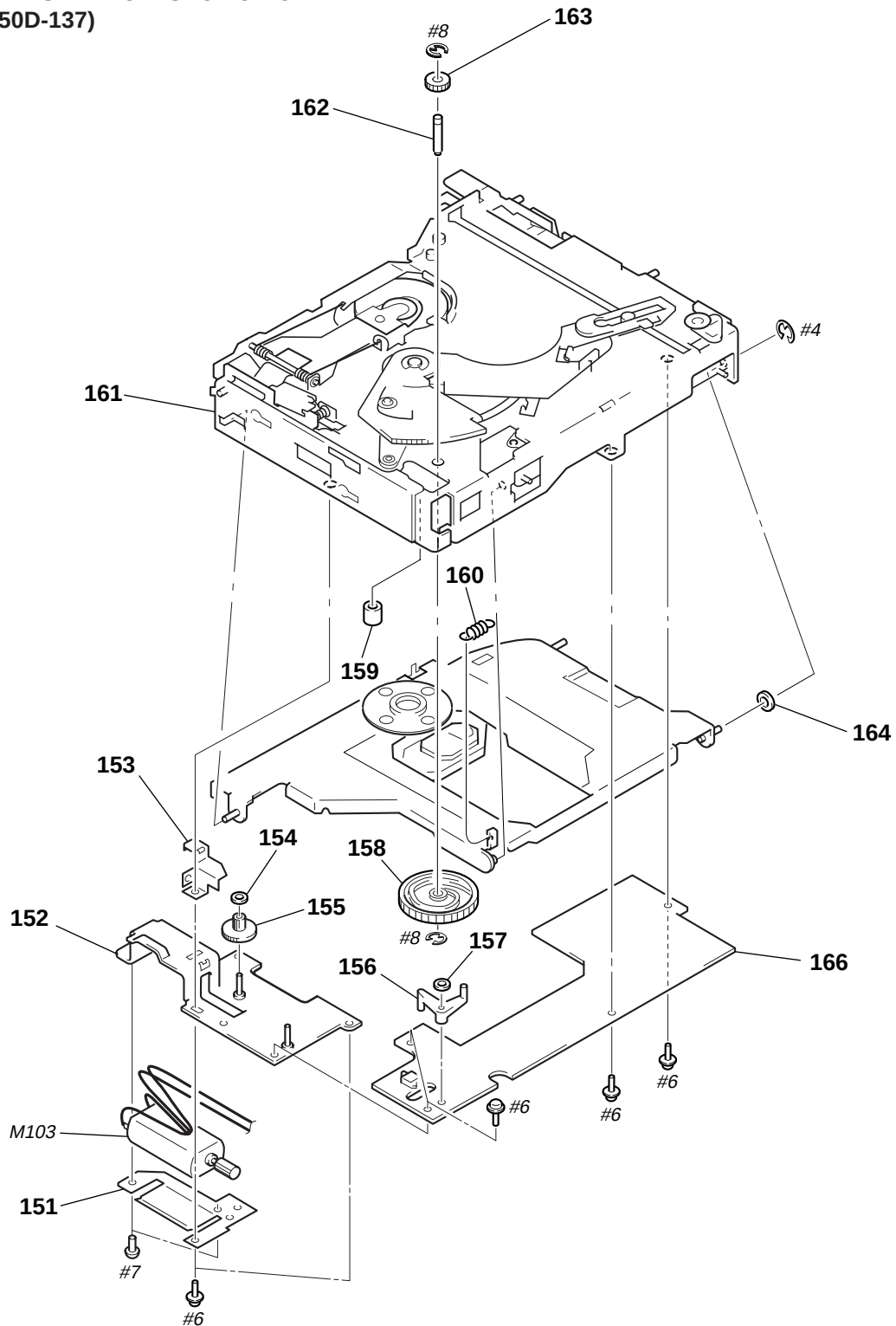
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
51	X-3375-497-1	CHASSIS (U) SUB ASSY		53	4-965-759-01	WASHER, POLYETHYLENE	
52	3-024-161-01	SPRING (SUT)		54	3-011-997-01	SPRING (STOPPER. LOWER)	

(3) MECHANISM DECK SECTION-2
(MG-250D-137)



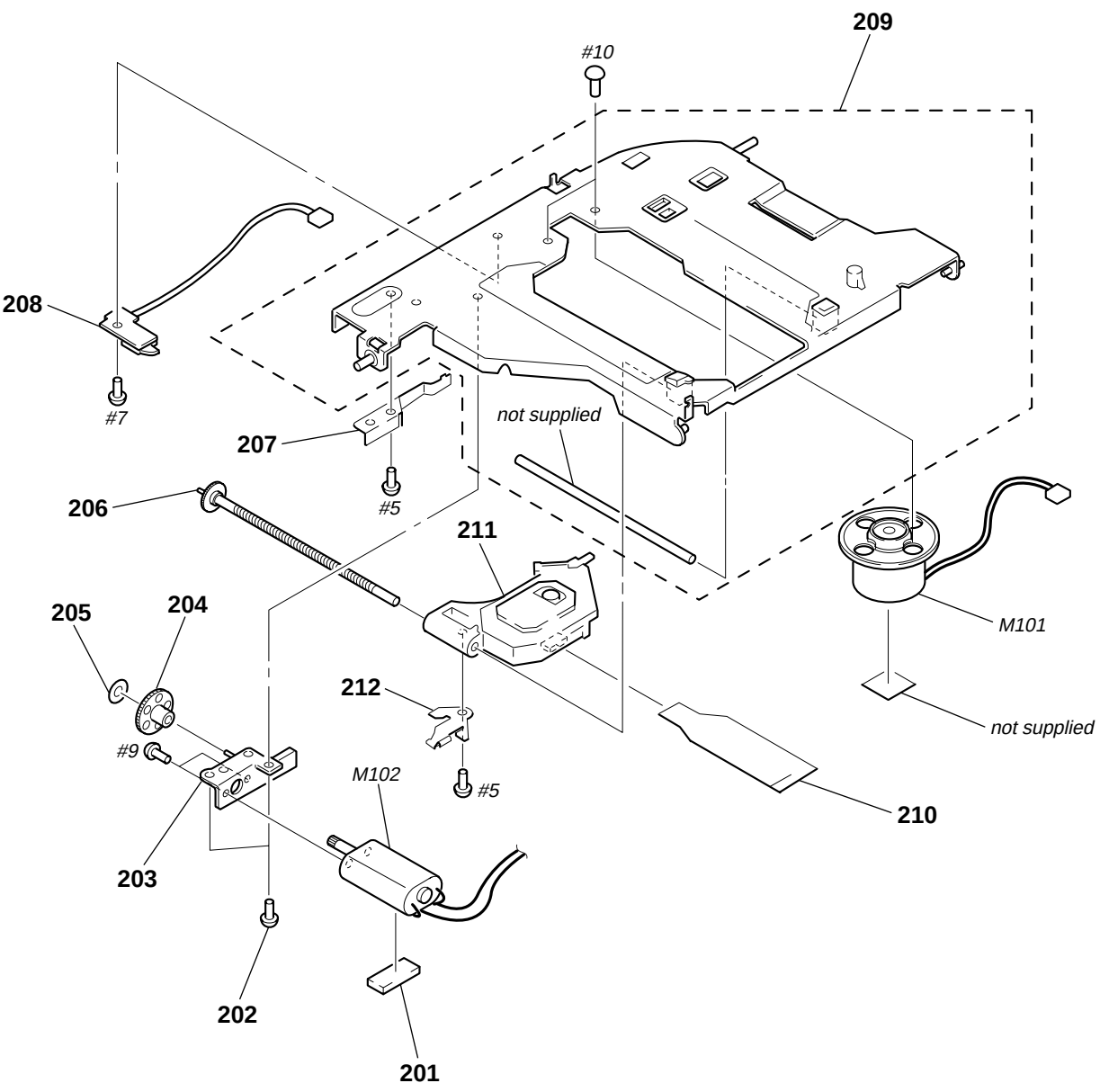
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
101	3-024-170-01	SPRING (SB), TENSION		103	X-3378-136-1	CHASSIS (D.D) SUB ASSY	
* 102	3-024-172-01	BRACKET (EVM)		M104	A-3301-123-A	ELJ MOTOR ASSY (ELEVATOR)	

(4) MECHANISM DECK SECTION-3
(MG-250D-137)



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
* 151	3-024-150-01	RETAINER (CHM)		160	3-010-268-01	SPRING (DH), TENSION	
* 152	X-3378-080-1	BRACKET (CHM. D) ASSY		* 161	A-3290-194-I	MAIN ASSY, CHASSIS (EVY)	
153	3-010-270-01	COVER (CHM)		162	3-010-254-01	SHAFT (ROTARY PREVENTION C)	
154	3-321-813-01	WASHER, COTTER POLYETHYLENE		163	3-010-253-01	GEAR (ML)	
155	3-017-139-01	GEAR (NWL)		164	3-701-438-11	WASHER, 2.5	
156	3-010-255-01	ARM (NSW)		* 166	A-3317-993-A	RF BOARD, COMPLETE	
157	3-573-936-00	STOPPER, REEL		M103	A-3301-123-A	ELJ MOTOR ASSY (CHUCKING)	
158	X-3373-552-1	GEAR (LOAD CAM) ASSY					
159	3-010-252-01	ROLLER (CRE)					

(5) MECHANISM DECK SECTION-4
(MG-250D-137)



The components identified by mark $\triangle$ or dotted line with mark $\triangle$ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque $\triangle$ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.
--	--

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
201	3-911-215-02	SHEET (LEAD RETAINER)		* 208	1-664-104-11	SW BOARD	
202	3-920-362-01	SCREW (ESCUTCHEON)		* 209	A-3301-077-A	BASE (OPT) (J) ASSY	
203	X-3375-219-1	HOLDER (SLED) ASSY		210	1-664-626-11	OP FLEXIBLE BOARD	
204	3-022-841-01	GEAR (SD)		$\triangle$ 211	8-820-010-06	OPTICAL PICK-UP KSS-521A/J2RP	
205	3-573-936-00	STOPPER, REEL		212	3-010-262-01	DETENT (SLED)	
206	A-3291-958-A	SHAFT (SLED) ASSY		M101	A-3291-956-B	MOTOR SUB ASSY, SPINDLE	
207	3-010-263-01	DETENT (SHAFT THRUST)		M102	A-3291-955-A	MOTOR SUB ASSY, SLED	

SECTION 9 ELECTRICAL PARTS LIST

JACK

MAIN

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
All resistors are in ohms.
METAL: Metal-film resistor.
METAL OXIDE: Metal oxide-film resistor.
F: nonflammable

- Items marked “*” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
In each case, u: μ , for example:
uA. . : μ A. . uPA. . : μ PA. .
uPB. . : μ PB. . uPC. . : μ PC. .
uPD. . : μ PD. .
- CAPACITORS
uF: μ F
- COILS
uH: μ H

The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
*	1-674-307-12	JACK BOARD *****		C203	1-163-038-00	CERAMIC CHIP 0.1uF	25V
		< CAPACITOR >		C204	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C901	1-163-009-11	CERAMIC CHIP 0.001uF	10% 50V	C205	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C902	1-163-038-00	CERAMIC CHIP 0.1uF	25V	C206	1-163-021-11	CERAMIC CHIP 0.01uF	10% 50V
C904	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	C301	1-163-038-00	CERAMIC CHIP 0.1uF	25V
		< CONNECTOR >		C302	1-163-038-00	CERAMIC CHIP 0.1uF	25V
CN901	1-779-077-61	PLUG, CONNECTOR (CONTROL, AUDIO OUT)		C303	1-163-038-00	CERAMIC CHIP 0.1uF	25V
CN901	1-778-775-21	CONNECTOR, FFC/FPC 13P		C304	1-163-009-11	CERAMIC CHIP 0.001uF	10% 50V
		< FERRITE BEAD >		C305	1-163-017-00	CERAMIC CHIP 0.0047uF	5% 50V
FB901	1-500-445-21	FERRITE 0uH		C306	1-110-501-11	CERAMIC CHIP 0.33uF	10% 16V
FB902	1-500-445-21	FERRITE 0uH		C307	1-109-982-11	CERAMIC CHIP 1uF	10% 10V
FB903	1-500-445-21	FERRITE 0uH		C308	1-163-038-00	CERAMIC CHIP 0.1uF	25V
		< IC >		C309	1-125-701-11	DOUBLE LAYER 0.047F	5.5V
IC901	1-532-686-21	LINK, IC		C310	1-124-589-11	ELECT 47uF	20% 16V
*****				C311	1-164-346-11	CERAMIC CHIP 1uF	16V
*	A-3326-236-A	MAIN BOARD, COMPLETE *****		C314	1-124-589-11	ELECT 47uF	20% 16V
	1-664-628-11	JACK FLEXIBLE BOARD		C315	1-163-038-00	CERAMIC CHIP 0.1uF	25V
	1-676-339-11	MAIN FLEXIBLE BOARD		C316	1-115-466-00	ELECT 1000uF	20% 16V
	3-028-802-01	SPACER (MOUNT 30)		C317	1-135-612-61	ELECT 100uF	20% 16V
*	3-939-139-01	SPACER		C318	1-135-612-61	ELECT 100uF	20% 16V
		< CAPACITOR >		C320	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C101	1-164-182-11	CERAMIC CHIP 0.0033uF	10% 50V	C321	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C102	1-164-004-11	CERAMIC CHIP 0.1uF	10% 25V	C401	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C103	1-163-809-11	CERAMIC CHIP 0.047uF	10% 25V	C402	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C104	1-163-011-11	CERAMIC CHIP 0.0015uF	10% 50V	C403	1-109-982-11	CERAMIC CHIP 1uF	10% 10V
C105	1-163-001-11	CERAMIC CHIP 220PF	10% 50V	C404	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C106	1-115-566-11	CERAMIC CHIP 4.7uF	10% 10V	C405	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C107	1-163-021-11	CERAMIC CHIP 0.01uF	10% 50V	C501	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C108	1-163-038-00	CERAMIC CHIP 0.1uF	25V	C502	1-164-004-11	CERAMIC CHIP 0.1uF	10% 25V
C109	1-163-038-00	CERAMIC CHIP 0.1uF	25V	C503	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C112	1-163-038-00	CERAMIC CHIP 0.1uF	25V	C504	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C113	1-163-038-00	CERAMIC CHIP 0.1uF	25V	C601	1-115-650-11	ELECT 47uF	20% 16V
C114	1-163-038-00	CERAMIC CHIP 0.1uF	25V	C602	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C115	1-163-038-00	CERAMIC CHIP 0.1uF	25V	C603	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C201	1-163-038-00	CERAMIC CHIP 0.1uF	25V	C604	1-135-612-61	ELECT 100uF	20% 16V
C202	1-164-004-11	CERAMIC CHIP 0.1uF	10% 25V	C606	1-163-038-00	CERAMIC CHIP 0.1uF	25V
				C608	1-163-038-00	CERAMIC CHIP 0.1uF	25V
				C609	1-115-650-11	ELECT 47uF	20% 16V
				C610	1-126-157-11	ELECT 10uF	20% 16V
				C611	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
				C620	1-126-157-11	ELECT 10uF	20% 16V
				C621	1-163-251-11	CERAMIC CHIP 100PF	5% 50V
				C630	1-126-157-11	ELECT 10uF	20% 16V

MAIN

Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
C642	1-163-001-11	CERAMIC CHIP 220PF 10% 50V				R103	1-216-113-00	METAL CHIP 470K 5% 1/10W			
		< DIODE >				R104	1-216-061-00	METAL CHIP 3.3K 5% 1/10W			
D301	8-719-975-40	DIODE RB411D-T146				R105	1-216-061-00	METAL CHIP 3.3K 5% 1/10W			
D302	8-719-017-94	DIODE MA8180-TX				R106	1-216-073-00	METAL CHIP 10K 5% 1/10W			
D303	8-719-017-94	DIODE MA8180-TX				R107	1-216-121-00	RES-CHIP 1M 5% 1/10W			
D304	8-719-975-40	DIODE RB411D-T146				R108	1-216-097-00	RES-CHIP 100K 5% 1/10W			
D305	8-719-975-40	DIODE RB411D-T146				R109	1-216-073-00	METAL CHIP 10K 5% 1/10W			
						R110	1-216-073-00	METAL CHIP 10K 5% 1/10W			
D306	8-719-914-43	DIODE DAN202K-T-146				R111	1-216-049-11	RES-CHIP 1K 5% 1/10W			
D307	8-719-069-56	DIODE UDZS-TE17-6.2B				R114	1-216-049-11	RES-CHIP 1K 5% 1/10W			
D308	8-719-988-61	DIODE 1SS355TE-17				R202	1-216-097-00	RES-CHIP 100K 5% 1/10W			
D311	8-719-914-44	DIODE DAP202K-T-146				R203	1-216-097-00	RES-CHIP 100K 5% 1/10W			
D314	8-719-975-40	DIODE RB411D-T146				R204	1-216-097-00	RES-CHIP 100K 5% 1/10W			
D315	8-719-988-61	DIODE 1SS355TE-17				R205	1-216-097-00	RES-CHIP 100K 5% 1/10W			
D316	8-719-422-67	DIODE MA8062-H-TX				R206	1-216-097-00	RES-CHIP 100K 5% 1/10W			
D317	8-719-988-61	DIODE 1SS355TE-17				R207	1-216-049-11	RES-CHIP 1K 5% 1/10W			
D318	8-719-976-96	DIODE MA8047-H-TX				R208	1-216-089-00	RES-CHIP 47K 5% 1/10W			
D320	8-719-069-60	DIODE UDZS-TE17-9.1B				R211	1-216-097-00	RES-CHIP 100K 5% 1/10W			
D501	8-719-988-61	DIODE 1SS355TE-17				R212	1-216-097-00	RES-CHIP 100K 5% 1/10W			
D601	8-719-069-57	DIODE UDZS-TE17-6.8B				R213	1-216-097-00	RES-CHIP 100K 5% 1/10W			
D602	8-719-069-57	DIODE UDZS-TE17-6.8B				R219	1-216-049-11	RES-CHIP 1K 5% 1/10W			
		< FERRITE BEAD >				R221	1-216-097-00	RES-CHIP 100K 5% 1/10W			
FB601	1-500-445-21	FERRITE 0uH				R301	1-216-089-00	RES-CHIP 47K 5% 1/10W			
		< IC >				R302	1-216-097-00	RES-CHIP 100K 5% 1/10W			
IC101	8-752-384-15	IC CXD2530Q				R303	1-216-099-00	METAL CHIP 120K 5% 1/10W			
IC201	8-752-903-71	IC CXP84332-210Q				R304	1-216-089-00	RES-CHIP 47K 5% 1/10W			
IC202	8-759-660-38	IC BR24C16FJ-E2				R306	1-216-095-00	METAL CHIP 82K 5% 1/10W			
IC301	8-759-040-83	IC BA6287F				R307	1-216-049-11	RES-CHIP 1K 5% 1/10W			
IC302	8-759-444-86	IC BA8272F-E2				R308	1-216-049-11	RES-CHIP 1K 5% 1/10W			
IC304	8-759-363-81	IC XC61AN4002PR				R309	1-216-089-00	RES-CHIP 47K 5% 1/10W			
IC401	8-752-374-09	IC CXD2522Q				R311	1-216-101-00	METAL CHIP 150K 5% 1/10W			
IC402	8-759-576-67	IC MSM514400D-60TS-K				R312	1-216-073-00	METAL CHIP 10K 5% 1/10W			
IC403	8-759-242-76	IC TC7W08F				R314	1-216-295-00	SHORT 0			
IC501	8-752-904-83	IC CXP83413-049Q				R316	1-216-073-00	METAL CHIP 10K 5% 1/10W			
IC502	8-759-497-29	IC KM62256DLG-7LT				R318	1-216-033-00	METAL CHIP 220 5% 1/10W			
IC503	8-759-243-19	IC TC7SU04F				R320	1-216-041-00	METAL CHIP 470 5% 1/10W			
IC601	8-759-494-78	IC TC9464FN-EL				R321	1-216-041-00	METAL CHIP 470 5% 1/10W			
		< TRANSISTOR >				R402	1-216-105-00	RES-CHIP 220K 5% 1/10W			
Q201	8-729-020-67	TRANSISTOR XN1A312-TX				R403	1-216-033-00	METAL CHIP 220 5% 1/10W			
Q301	8-729-028-62	TRANSISTOR DTA115EKA-T146				R404	1-216-033-00	METAL CHIP 220 5% 1/10W			
Q302	8-729-230-49	TRANSISTOR 2SC2712-YG-TE85L				R405	1-216-033-00	METAL CHIP 220 5% 1/10W			
Q303	8-729-921-12	TRANSISTOR 2SD1834-T101				R406	1-216-033-00	METAL CHIP 220 5% 1/10W			
Q306	8-729-020-67	TRANSISTOR XN1A312-TX				R501	1-216-089-00	RES-CHIP 47K 5% 1/10W			
Q307	8-729-019-00	TRANSISTOR 2SD2394-G				R502	1-216-049-11	RES-CHIP 1K 5% 1/10W			
Q308	8-729-020-67	TRANSISTOR XN1A312-TX				R504	1-216-073-00	METAL CHIP 10K 5% 1/10W			
Q309	8-729-019-00	TRANSISTOR 2SD2394-G				R505	1-216-049-11	RES-CHIP 1K 5% 1/10W			
Q601	8-729-901-00	TRANSISTOR DTC124EKA-T146				R601	1-216-029-00	METAL CHIP 150 5% 1/10W			
Q602	8-729-027-23	TRANSISTOR DTA114EKA-T146				R602	1-216-033-00	METAL CHIP 220 5% 1/10W			
Q610	8-729-015-39	TRANSISTOR UN2226- (TX)				R610	1-216-033-00	METAL CHIP 220 5% 1/10W			
Q620	8-729-015-39	TRANSISTOR UN2226- (TX)				R611	1-216-097-00	RES-CHIP 100K 5% 1/10W			
		< RESISTOR >				R612	1-216-295-00	SHORT 0			
R101	1-216-105-00	RES-CHIP 220K 5% 1/10W				R620	1-216-033-00	METAL CHIP 220 5% 1/10W			
R102	1-216-121-00	RES-CHIP 1M 5% 1/10W				R621	1-216-097-00	RES-CHIP 100K 5% 1/10W			
						R622	1-216-295-00	SHORT 0			
						R630	1-216-295-00	SHORT 0			

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
< VARIABLE RESISTOR >				C56	1-163-038-00	CERAMIC CHIP 0.1uF	25V
RV201	1-223-834-11	RES, ADJ, CARBON 47K		C57	1-163-038-00	CERAMIC CHIP 0.1uF	25V
RV202	1-225-951-21	RES, VAR, SLIDE 10K		C58	1-163-038-00	CERAMIC CHIP 0.1uF	25V
		(ELEVATOR HEIGHT SENSOR)		C59	1-163-038-00	CERAMIC CHIP 0.1uF	25V
< SWITCH >				C60	1-104-914-11	TANTALUM CHIP 22uF	20% 16V
SW201	1-771-540-11	SWITCH, PUSH (1 KEY) (MAGAZINE DETECT)		< CONNECTOR >			
SW202	1-771-540-11	SWITCH, PUSH (1 KEY)		CNJ11	1-778-776-21	CONNECTOR, FPC 17P	
		(MAGAZINE IN/OUT DETECT)		CNJ12	1-778-777-21	CONNECTOR, FPC 26P	
SW301	1-571-532-21	SWITCH, TACTIL (▲)		* CNP53	1-580-055-21	PIN, CONNECTOR (SMD) 2P	
< VIBRATOR >				< IC >			
X201	1-781-472-21	VIBRATOR, CERAMIC (8MHz)		IC11	8-752-082-14	IC CXA1992BR	
X501	1-767-510-11	VIBRATOR, CERAMIC (10MHz)		IC51	8-759-071-79	IC BA6297AFP	
X601	1-760-307-11	VIBRATOR, CERAMIC (16.9344MHz)		IC52	8-759-040-83	IC BA6287F	
*****				< TRANSISTOR >			
*	A-3317-993-A	RF BOARD, COMPLETE		Q11	8-729-141-48	TRANSISTOR 2SB624T1-BV345	
		*****		< RESISTOR >			
< CAPACITOR >				R11	1-218-348-11	RES-CHIP 110K	5% 1/16W
C10	1-163-009-11	CERAMIC CHIP 0.001uF	10% 50V	R12	1-216-839-11	METAL CHIP 33K	5% 1/16W
C12	1-113-500-11	TANTALUM CHIP 100uF	20% 10V	R13	1-216-839-11	METAL CHIP 33K	5% 1/16W
C13	1-163-038-00	CERAMIC CHIP 0.1uF	25V	R14	1-218-348-11	RES-CHIP 110K	5% 1/16W
C14	1-165-176-11	CERAMIC CHIP 0.047uF	10% 16V	R16	1-216-857-11	METAL CHIP 1M	5% 1/16W
C15	1-164-230-11	CERAMIC CHIP 220PF	5% 50V	R17	1-216-837-11	METAL CHIP 22K	5% 1/16W
C16	1-107-826-11	CERAMIC CHIP 0.1uF	10% 16V	R18	1-216-841-11	METAL CHIP 47K	5% 1/16W
C17	1-164-227-11	CERAMIC CHIP 0.022uF	10% 25V	R22	1-216-857-11	METAL CHIP 1M	5% 1/16W
C18	1-111-253-11	TANTALUM CHIP 100uF	20% 6.3V	R25	1-216-851-11	METAL CHIP 330K	5% 1/16W
C19	1-163-038-00	CERAMIC CHIP 0.1uF	25V	R26	1-216-845-11	METAL CHIP 100K	5% 1/16W
C21	1-162-966-11	CERAMIC CHIP 0.0022uF	10% 50V	R27	1-216-295-00	SHORT 0	
C22	1-107-823-11	CERAMIC CHIP 0.47uF	10% 16V	R28	1-216-295-00	SHORT 0	
C23	1-113-682-11	TANTALUM CHIP 33uF	20% 10V	R30	1-216-829-11	METAL CHIP 4.7K	5% 1/16W
C24	1-107-826-11	CERAMIC CHIP 0.1uF	10% 16V	R31	1-216-829-11	METAL CHIP 4.7K	5% 1/16W
C25	1-107-826-11	CERAMIC CHIP 0.1uF	10% 16V	R32	1-216-837-11	METAL CHIP 22K	5% 1/16W
C26	1-163-021-11	CERAMIC CHIP 0.01uF	10% 50V	R33	1-216-158-00	RES-CHIP 22	5% 1/8W
C27	1-164-677-11	CERAMIC CHIP 0.033uF	10% 16V	R34	1-216-855-11	METAL CHIP 680K	5% 1/16W
C28	1-164-245-11	CERAMIC CHIP 0.015uF	10% 25V	R35	1-216-835-11	METAL CHIP 15K	5% 1/16W
C29	1-165-176-11	CERAMIC CHIP 0.047uF	10% 16V	R36	1-216-836-11	METAL CHIP 18K	5% 1/16W
C30	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V	R37	1-216-851-11	METAL CHIP 330K	5% 1/16W
C31	1-113-987-11	TANTALUM CHIP 4.7uF	20% 25V	R38	1-216-837-11	METAL CHIP 22K	5% 1/16W
C32	1-164-677-11	CERAMIC CHIP 0.033uF	10% 16V	R39	1-216-847-11	METAL CHIP 150K	5% 1/16W
C33	1-162-915-11	CERAMIC CHIP 10PF	0.5PF 50V	R40	1-218-273-11	RES-CHIP 510K	5% 1/16W
C34	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V	R41	1-218-296-11	RES-CHIP 75K	5% 1/16W
C35	1-104-700-11	CERAMIC CHIP 0.027uF	10% 16V	R42	1-202-930-11	RES-CHIP 750K	5% 1/16W
C36	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V	R43	1-216-849-11	METAL CHIP 220K	5% 1/16W
C37	1-109-982-11	CERAMIC CHIP 1uF	10% 10V	R44	1-216-846-11	METAL CHIP 120K	5% 1/16W
C38	1-104-913-11	TANTALUM CHIP 10uF	20% 16V	R45	1-216-837-11	METAL CHIP 22K	5% 1/16W
C39	1-163-038-00	CERAMIC CHIP 0.1uF	25V	R46	1-216-847-11	METAL CHIP 150K	5% 1/16W
C40	1-109-982-11	CERAMIC CHIP 1uF	10% 10V	R47	1-216-834-11	METAL CHIP 12K	5% 1/16W
C41	1-164-227-11	CERAMIC CHIP 0.022uF	10% 25V	R48	1-216-845-11	METAL CHIP 100K	5% 1/16W
C42	1-164-227-11	CERAMIC CHIP 0.022uF	10% 25V	R49	1-216-093-11	RES-CHIP 68K	5% 1/10W
C43	1-164-227-11	CERAMIC CHIP 0.022uF	10% 25V	R50	1-216-841-11	METAL CHIP 47K	5% 1/16W
C51	1-163-019-00	CERAMIC CHIP 0.0068uF	10% 50V	R51	1-216-073-00	METAL CHIP 10K	5% 1/10W
C52	1-163-038-00	CERAMIC CHIP 0.1uF	25V	R52	1-216-093-11	RES-CHIP 68K	5% 1/10W
C53	1-163-038-00	CERAMIC CHIP 0.1uF	25V	R53	1-216-073-00	METAL CHIP 10K	5% 1/10W
C54	1-163-038-00	CERAMIC CHIP 0.1uF	25V	R54	1-216-073-00	METAL CHIP 10K	5% 1/10W
C55	1-163-023-00	CERAMIC CHIP 0.015uF	5% 50V				

RF

SW

Ref. No.	Part No.	Description	Remark		
R55	1-216-073-00	METAL CHIP	10K	5%	1/10W
R56	1-216-093-11	RES-CHIP	68K	5%	1/10W
R57	1-216-081-00	METAL CHIP	22K	5%	1/10W
R58	1-216-093-11	RES-CHIP	68K	5%	1/10W
R59	1-216-073-00	METAL CHIP	10K	5%	1/10W
R60	1-216-073-00	METAL CHIP	10K	5%	1/10W
R61	1-216-073-00	METAL CHIP	10K	5%	1/10W
R62	1-216-085-00	METAL CHIP	33K	5%	1/10W
R63	1-216-073-00	METAL CHIP	10K	5%	1/10W
R64	1-216-073-00	METAL CHIP	10K	5%	1/10W
R65	1-216-073-00	METAL CHIP	10K	5%	1/10W
< VARIABLE RESISTOR >					
RV14	1-238-091-11	RES, ADJ, CERMET	22K		
< SWITCH >					
SW11	1-762-946-12	SWITCH, PUSH (1 KEY)	(CHUCKING END DETECT)		
SW12	1-762-946-12	SWITCH, PUSH (1 KEY)	(SAVE END DETECT)		

*	1-664-104-11	SW BOARD	*****		
SW1	1-529-565-11	SWITCH, PUSH (1 KEY) (LIMIT)	*****		

MISCELLANEOUS					

210	1-664-626-11	OP FLEXIBLE BOARD			
△ 211	8-820-010-06	OPTICAL PICK-UP KSS-521A/J2RP			
M101	A-3291-956-B	MOTOR SUB ASSY, SPINDLE			
M102	A-3291-955-A	MOTOR SUB ASSY, SLED			
M103	A-3301-123-A	ELJ MOTOR ASSY (CHUCKING)			
M104	A-3301-123-A	ELJ MOTOR ASSY (ELEVATOR)	*****		

HARDWARE LIST					

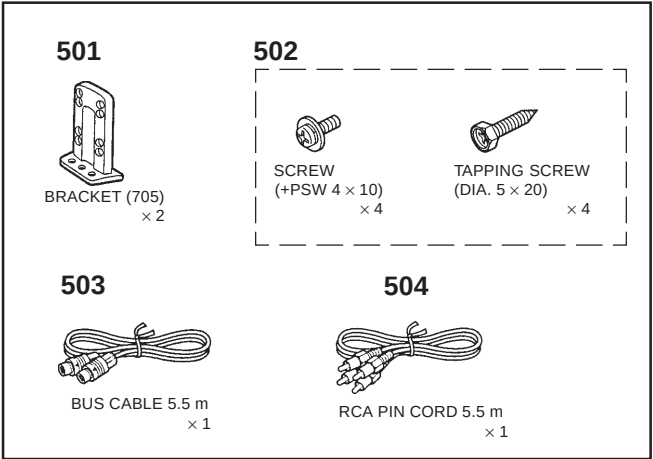
#1	7-627-852-07	SCREW, PRECISION +P 1.7X2.5			
#2	7-685-792-09	SCREW +PTT 2.6X6 (S)			
#3	7-685-781-09	SCREW +PTT 2X4 (S)			
#4	7-624-104-04	STOPRING 2.0, TYPE -E			
#5	7-627-554-07	SCREW, PRECISION +P 2X2.2			
#6	7-628-253-00	SCREW +PS 2X4			
#7	7-627-553-27	SCREW, PRECISION +P 2X2.5			
#8	7-624-102-04	STOPRING 1.5, TYPE-E			
#9	7-627-850-28	SCREW, PRECISION +P 1.4X3			
#10	7-627-000-00	SCREW, PRECISION +P 1.7X2.2 TYPE 3			
#12	7-685-780-09	SCREW +PTT 2X3 (S)	*****		

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
ACCESSORIES & PACKING MATERIALS			

	3-867-910-11	MANUAL, INSTRUCTION (ENGLISH, FRENCH, SPANISH, CHINESE) (US, Canadian, E)	
	3-867-910-21	MANUAL, INSTRUCTION (ENGLISH, SPANISH, SWEDISH, PORTUGUESE) (AEP, UK)	
	3-867-910-31	MANUAL, INSTRUCTION (FRENCH, GERMAN, DUTCH, ITALIAN) (AEP, UK)	
	3-867-910-41	MANUAL, INSTRUCTION (ENGLISH, GERMAN, POLISH, RUSSIAN) (German)	
A-3291-950-C MAGAZINE (250) ASSY			

PARTS FOR INSTALLATION AND CONNECTIONS			

501	3-040-583-21	BRACKET	
* 502	X-3369-824-1	SCREW ASSY	
503	1-590-519-21	CORD (WITH CONNECTOR)	(BUS CABLE 5.5m)
504	1-790-455-21	CORD, CONNECTION (RCA PIN CORD 5.5m)	



The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.
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